
**After Action Report: October 4, 2017 and October 12, 2017
Site Visits
Table Top Site Investigation
27th Avenue Remediation Site,
Maricopa County, AZ**

Prepared for:

State of Arizona Department of Administration



ADOA
ARIZONA DEPARTMENT OF ADMINISTRATION

**Prepared
under the:
Arizona Department of Environmental Quality
Purchase Order No. ADEQ14-073582:63
PO0000259694**

Final

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LIST OF ACRONYMS

AAR	After Action Report
ADEQ	Arizona Department of Environmental Quality
ADOA	Arizona Department of Administration
CSM	Conceptual Site Model
DGM	Digital Geophysical Mapping
GPS	Global Positioning System
IAW	in accordance with
IED	Improvised Explosive Device
MCSO	Maricopa County Sheriff's Office
MD	Munition Debris
MEC	Munitions and Explosives of Concern
MPPEH	Material Potentially Presenting an Explosive Hazard
PMP	Project Management Plan
PPE	Personal Protection Equipment
QC	Quality Control
RFP	Request for Proposal
ROE	Right of Entry
SI	Site Investigation
SRS	Sustainment and Restoration Services, LLC
SSFR	Site Specific Final Report
SOW	Statement of Work
TO	Task Order
UFP-QAPP	Uniform Federal Policy-Quality Assurance Project Plan
USA	USA Environmental, Inc.
UXO	Unexploded Ordnance
ZAPATA	Zapata, Inc.

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1. INTRODUCTION

In accordance with (IAW) Purchase Order (PO) No. ADEQ14-073582:63; PO 0000259694 and the Project Management Plan (PMP), UXO Pro, Inc (UXO Pro) completed site visits associated with Task 4 and Task 7. The Site visits were conducted on October 4, 2017 (Task 4) and October 12, 2017 (Task 7). This After Action Report (AAR) summarizes the site visit field activities, provides recommendations resulting from the October 4, 2017 site visit and presents the recommended Statement of Work (SOW) for the removal action. Table 1-1 lists the appendices accompanying this report.

Table 1-1: AAR Appendices

Appendix	Description
A	Photograph Log. The photograph log captures the site conditions identified during the October 4, 2017 site visit
B	Statement of Work. UXO Pro developed a 27th Avenue Remediation Site Removal Action ⁽¹⁾ SOW consistent with the observations of the October 4, 2017 Site Visit and per the guidance provided in the PMP. The SOW included the following: <ul style="list-style-type: none">a. Project Objectivesb. Site Historyc. Planning Assumptionsd. Planning Requirements [e.g. Kickoff meeting, project schedule, milestone payment plan, Technical Project Planning, Uniform Federal Policy-Quality Assurance Project Plan (UFP-QAPP) Development, and the capture of GeoSpatial Data]e. 27th Avenue Remediation Site Selected Remedy Field Activity requirements and performance standards.f. The development of a Site Specific Final Report (SSFR)
C	Maps.
D	Daily Log. The Daily Log provides a summary of the site visit and hazard sign installation tasks conducted during this period

(1) Removal Action is defined as the removal and proper disposal of Munitions and Explosives of Concern (MEC), Material Potentially Presenting an Explosive Hazard (MPPEH) and Improvised Explosive Devices (IED's) from 27th Avenue, Maricopa County, Arizona Site per the Uniform Federal Policy-Quality Assurance Project Plan (UFP-QAPP).

1.1 SITE VISIT OBJECTIVES

UXO Pro, Inc. (UXO Pro) coordinated the site visits with Arizona Department of Administration (ADOA) and Arizona Department of Environmental Quality (ADEQ). ADOA negotiated and received Rights of Entry (ROE) from with the land owner (Gavilan Peak Estates).

The October 4, 2017 site visit objectives follow:

- Evaluate site conditions to support the development of the Conceptual Site Model (CSM). The CSM will be added to the Table Top Site Investigation (SI) Report and has not been included in this AAR.
- Determine the level of surface and subsurface anomaly densities through the sampling of various site areas by conducting meandering analog assisted visual transects
- Identify potential explosive hazards or other site related hazards,
- Through the discovery of visual evidence, identify areas in which MEC, IEDs or explosives are assumed to have been used.
- Using the October 4 site visit develop a SOW per 27th Avenue Remediation Site - Task 6. The SOW accompanied the Request for Proposal (RFP) in which the UXO Companies used as the basis for the October 12, 2017 Site Visit and their technical approach and cost submissions.

The October 12, 2017 site visit objective was to allow the UXO Companies responding to the RFP to gather site information for their technical approach and cost submissions.

2. SITE VISITS

2.1 TASK 4: OCTOBER 4, 2017 SITE VISIT

On October 4, 2017 UXO Pro conducted a site visit to the 27th Avenue Remediation Site. Task 9: Installation of Hazard Warning Signs (Appendix D) was initiated concurrently with the site visit. The site visit attendees are listed below:

- Site Visit
 - Allan Johnson (Gavilan Peak Estates)
 - Thomas Bourque, Keith Rivera (UXO Pro)
- Hazard Warning Sign Installation
 - Matt Levesque (UXO Pro)
 - Tim Gaudette, Tim Froats, and Steven Woolen Jr. (Lemme Engineering, Inc.)

The Site Visit Team and the Hazard Warning Sign Installation Team met at the “Roadrunner Restaurant and Saloon”, a local restaurant chosen for its proximity to the work site, in New River, Arizona at 6:00 AM on October 4, 2017. Following introductions, Mr. Bourque provided a brief overview of the tasks to be completed during the day’s work. Mr. Johnson answered questions on the background of the site and briefed the teams on how to get to the site. Mr. Rivera (UXO Pro Safety Officer) conducted a site-specific brief and the safety brief.

Once the operational and safety briefs were completed Mr. Johnson escorted the Site Visit Team and the Hazard Warning Sign Installation Team to the 27th Avenue Remediation Site.

Upon arrival Lemme Engineering, with UXO escort provided by Mr. Levesque, broke from the site visit team to locate the control monuments that would be the basis for the Global Positioning System (GPS) positioning of the surveyed pins used to identify each Hazard Warning Signs placement. Additional details for Task 9 Hazard Sign Installation can be found in Appendix D.

Mr. Johnson then conducted a site orientation tour for the site visit team (Mr. Bourque and Mr. Rivera). During this time Mr. Johnson remained either in the truck or on the primary road as he described the properties. At one point, he entered the main house and provided a tour of the interior. Once the site orientation was completed Mr. Johnson issued Mr. Bourque two gate keys and left the properties. Upon his departure, the Site Visit Team started the site assessment.

2.1.1 SITE VISIT OBSERVATIONS

Table 2-1 presents the site features listed in this report and their GPS coordinates. These site features also correlate with the photograph log found in Appendix A.

Table 2-1: Site Visit Features with Geolocation

Site Feature Designation Number	Description	Coordinates	
1	Shed Near the Main House	33° 54' 17.4" N	112° 7' 14.9" W
2	Approximate location of past discovered hand grenades with tripwires	33° 54' 16.9" N	112° 7' 16.3" W
3	Main house (front)	33° 54' 16.4" N	112° 7' 15.5" W
4	Bunk House	33° 54' 15.9" N	112° 7' 15.1" W
5	Possible demo pit (start) (Munition Debris (MD) discovered)	33° 54' 15.5" N	112° 7' 11.4" W
	Possible demo pit (end) (MD discovered)	33° 54' 14.9" N	112° 7' 11.1" W

6	Mining pit	33° 54' 13.7" N	112° 7' 16.8" W
7	Mining pit	33° 54' 6.3" N	112° 7' 14.9" W
8	Magazine	33° 54' 3.7" N	112° 7' 15.8" W
9	Storage shed	33° 54' 3.8" N	112° 7' 24.9" W
10	Possible demo pit (MD discovered)	33° 54' 4.4" N	112° 7' 25.6" W
11	Mine shaft (8 feet deep) ⁽¹⁾	33° 54' 7.1" N	112° 7' 13.4" W
12	Mine shaft (8 feet deep) ⁽¹⁾	33° 54' 7.1" N	112° 7' 13.6" W

(1) Additional shallow mine shafts and mining pits were discovered during the installation of the Hazard Warning Signs.

2.1.1.1 Shed Near the Main House

No MEC, MD or IEDs were identified at this location during the site visit. Past known activities through historical documents indicate there were extensive explosive hazards associated with this site. The Site Visit Team performed visual instrument aided meandering transects around the structure to identify subsurface anomaly counts and to avoid potential hazards. Extensive cultural debris is littered within the structure and around the immediate area. Electrical power has been cut from the main house to the shed. The shed has suffered damage when the Maricopa County Sheriff's Office (MCSO) detonated 97 blasting caps and several 35mm film containers which contained lead styphnate. The detonation took place within the rock wall on the north side of the shed which collapsed the roof of the carport section that extends from the shed.

Berms of rock and dirt were observed around the outside of the shed. As identified from previous reports, the dirt and rocks for these mounds were brought from the corral. At the dig site near the corral, where the dirt and rocks are believed to have originated, UXO Pro observed grenade fuzes and grenade spoons. Since MD are present at this dig site, there is a potential for hazards associated with the grenades to have been transported to the mounds around the shed. The potential need to remove the shed, rock wall and dirt berms surrounding the shed was discussed with Mr. Johnson and he stated that he had no objections.

- Recommendations
 - UXO Pro recommends the removal of the shed to ensure that any potential explosive hazards are not hidden within or under the structure.
 - The rock wall should be removed to ensure that any additional potential explosives are not stored within the wall structures as were identified during past investigations and discoveries.
 - Since the berms surrounding the shed came from a suspected munition testing or demolition area (the corral) the berms should be inspected to ensure they don't contain any hazards transported from the corral.

2.1.1.2 Main House

No MEC, MD or IEDs were identified at this location during the site visit. The main house is under disrepair.

- Approximately half of the windows have been broken
- The doors of the house were open upon arrival
- Looting of various removable items that may have had a value to recyclers has occurred.
- Mr. Johnson briefed the Site Visit Team on the squatters and trespassers that have been stripping the house of anything that may contain value. The house seems to be structurally sound and the roof appears to be undamaged.
- The house is infested with snakes and pack rats, and an owl was also seen in the house. Rodent

feces and cultural debris can be found throughout the house.

- The local electric company has cut the power to the house. The house electrical system has been stripped by looters.
- The area around the house is heavily littered with cultural debris.
- The Site Visit Team performed visual instrument aided meandering transects around the house's perimeter. Small arms ammunition debris and cultural debris litters the ground around the house.

The site conditions around the main house, shed, and bunk house consist of solid rock with little top soil. Mr. Johnson stated the field teams may use the house as a field office if they choose to do so.

- Recommendations
 - Due to the heavy quantities of cultural debris around these structures, the cultural debris resting on the surface should be removed prior to geophysical investigations.

2.1.1.3 Bunk House

No MEC, MD or IEDs were identified at this location during the site visit. The bunk house appears to have been in the process of refurbishment and then the repair work abruptly stopped. Portions of the roofing shingles have been removed, a 5-gallon roofing tar container is on the roof, and siding material is stacked on the front porch. The interior of the bunk house is mostly free of debris. Roof shingles are strewn on the ground around the structure along with building materials.

- Recommendations
 - The shingles should be sampled for asbestos prior to their handling.

2.1.1.4 Corral

No MEC or IEDs were identified at this location. However, MD items were discovered. Grenade spoons and fuzes were discovered at various locations on the eastern and western side of the corral fence. The fuze and spoon types are not consistent with military fragmentation grenades but are of the same type as the MK18 military smoke grenades or thermite grenades.

2.1.1.5 Dump Site

Directly to the south of the corral is a dump site. The inspection of the dump site revealed the presence of cultural debris including sealed paint cans. Two burn areas are present within this dump site.

- Recommendations
 - The cultural debris should be removed from the surface of the site prior to geophysical investigations of the dump site. Work production rates will benefit from a surface clearance of the cultural debris prior to subsurface investigations. This process will also provide an additional step for Quality Control (QC) (surface clearance QC and subsurface clearance QC).

2.1.1.6 The Wash

The wash (dried creek bed) meanders from the north property boundary to the south property boundary and then continues southward off the property. The creek bed near the corral and dump site produced the most MD. It is suspected that MD may have migrated further south via the wash and therefore a potential for MEC may also exist along the full length of the wash.

Recommendation: If MD is discovered in the wash near the edge of the southern property boundary, further investigation along the wash in the parcels that border the site should be recommended.

2.1.1.7 Explosive Magazine

The explosive magazine is located along the main road and is midway on the property. The magazine

door appears to have been forced open and the locking mechanism is no longer functional. The door was ajar when the Site Visit Team arrived on site. The interior of the magazine has debris present and there is evidence that a burn was conducted inside the magazine. The magazine walls are intact and the fire did not produce enough heat to cause spalling of the concrete. Evidence of snakes and rodents was present within the magazine. A false ceiling was observed in the magazine. The false ceiling is made of plywood and is in disrepair. The purpose of this false ceiling is uncertain as it wouldn't be needed in an explosive magazine.

- Recommendations
 - The burn area should be sampled for explosives to determine if any potential explosive hazards is present within the magazine.
 - The false ceiling along with the debris in the magazine is recommended for removal to ensure any potential explosive hazards are identified and properly disposed of.

2.1.1.8 Storage Shed

The storage shed is a concrete block wall structure. The walls are intact, but the roof has been compromised. The interior contains folded cardboard boxes and debris ranging from a couple feet to approximately four feet deep of materials. Cardboard casings were observed throughout the storage shed that appear to be containers for the “flash bang” grenades. A few accessible casings were inspected and observed empty. There wasn't any indications of explosives or residue inside the casings. In addition, a metal/ceramic (material unknown) container which appeared to be a type of fabricated grenade body was also observed in the shed but its designed purpose has not been confirmed. A drum labeled “Pull Down Powder” was also present in the storage shed. The building does not appear to be constructed of, or contain any, asbestos material. Outside of the building is a small armored bunker that has been constructed on skids. The bunker appears to have been used to protect personnel from fragmentation from detonations. Cultural debris is littered around the site and should be removed prior to the geophysical investigation. Immediately to the west of the storage shed and bunker is a large wash in which historical documents indicate fragmentation grenades were discovered. The Site Visit Team performed visual instrument aided meandering transects around the structure, in the wash, and on the sides of the wash to identify the presence of surface and subsurface anomalies. No MEC or IEDs were identified at this location. However, MD items were discovered. Grenade spoons and fuzes were discovered at various locations inside the wash.

- Recommendations
 - The contents of the “Pull Down Powder” container is assumed to be concrete but testing is recommended of the material for verification purposes.
 - An armored-up excavator is recommended to demolish the building and safely remove the building contents. The contents can then be distributed on the grounds outside of the building and sorted through to allow UXO Technicians to inspect the material and certify that any potential explosive hazard have been properly removed.
 - The UXO Companies competing for the work should be required to present alternatives to building demolition as part of their technical approach.

2.2 TASK 7: OCTOBER 12, 2017 SITE VISIT

On October 12, 2017 UXO Pro conducted a site visit to the 27th Avenue Remediation Site with three UXO Companies [USA Environmental, Inc (USA), Zapata, Inc. (ZAPATA), and Sustainment and Restoration Services, LLC (SRS)]. The site visit attendees are listed below:

- Michael Rambole (ADOA)
- Karin Harker (ADEQ)
- Thomas Bourque, Keith Rivera (UXO Pro)
- Alan Crandall, Henry Irizary (USA)

- Hugh Sease (SRS)
- Jeff Schwalm (ZAPATA)

Site Visit attendees met at the Roadrunner Restaurant and Saloon in New River, Arizona at 6:30 AM on October 12, 2017. Mr. Bourque introduced Mr. Rambole and Ms. Harker to the UXO Company representatives. Following introductions and general discussions between agencies, Mr. Bourque provided a brief overview of the site and the RFP. Mr. Rivera (UXO Pro Safety Officer) conducted a site-specific brief and the safety brief.

Once the safety briefs were completed Mr. Rambole and Ms. Harker departed and the remainder of the site visit attendees transited to the 27th Avenue Remediation Site.

Upon arrival Mr. Bourque conducted a site orientation tour for the site visit attendees and answered questions from the UXO Companies. Upon the completion of the site orientation each company separated to gather field data to develop their technical approach for their proposals.

The site visit was completed at 2:00 PM.

3. GENERAL OBSERVATIONS

Cultural debris is limited to areas around the building structures and appears to be the result of looters. Outside of these areas the property appears to be free of cultural debris. The sign installation teams witnessed no cultural debris on the surface of the soil during the installation of the warning signs. Which may indicate there should be significantly less cultural debris at distances away from the main structures. The Site Visit Team conducted meandering visual transects aided by “all metals” detectors out and away from the structures. All-metals detectors can locate both ferrous and non-ferrous metals in the subsurface to various depths depending on the size and orientation of the subsurface anomaly. The purpose for the all-metals detectors, was to ensure the safety of the site visit team and to determine the presence or absence of iron ore in the geology. The meandering transects were not designed transects as part of a statistical site analysis of hazards, but were used to capture the various site conditions for anomaly densities.

The geology does not appear to contain iron ore (industry term for the presence of iron ore in the geology is “hot rock”). This is an important site condition as “hot rock” raises the subsurface anomaly back ground level and impacts production rates. Since “hot rock” does not appear to be an issue on the project site all subsurface anomalies detected should be selected for investigation. This should increase the level of confidence in the final project findings.

Eleven mining dig sites were investigated and inspected with all metals detectors. There were no discoveries of metal debris either on the surface or in the subsurface. No “hot rocks” were identified. The dig site appears to have been excavated with heavy equipment due to the sidewall scarring at the dig sites. No evidence was present of the mining sites being excavated by using explosives. The deepest of the dig sites was approximately ten feet deep. Mining dig sites were also discovered during the hazard warning sign installation effort.

During the October 4, 2017 site visit, Mr. Johnson requested that he be allowed to access the site during the Removal Action (Phase 2 work). He also requested a copy of progress reports and the Final Report. Mr. Bourque also stated that he believed ADEQ intended to provide him with a Final Report covering the operations and the report will document the site activities conducted and level of confidence (e.g. 90% or 95%) in which the geophysicists will determine as the outcome from the field work. The report will also identify areas too steep for the UXO Technicians to safely work for investigation.

- Recommendations
 - Due to the quantity of rodent feces Personal Protection Equipment (PPE) will include particulate respirators to eliminate exposing the work force to Hantavirus. Bleach should also be sprayed over the floors if there is a potential for stirring up the dust and dirt from the floors of any building the UXO Technicians will work in.
 - UXO Pro recommends any project reports to be requested through ADEQ. It is common for land owners as stakeholders to receive project updates and final reports upon their request.
 - Mr. Johnson indicated that he may be interested in a site visit during the field work. Site visits should be authorized but under strict safety guidelines. Work stoppage may be required during site visits and the site visitor will require UXO Technician escorts to avoid MEC, IEDs and explosives. After hour site visits may also be requested. An after-hour site visit would not impact site operations but would still require a UXO Technician escort.
 - Access agreement modification may be required to authorize Mr. Johnson to visit the project site.

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4. RECOMMENDATION

The 27th Avenue Remediation Site has not undergone a removal action over the estimated 103 accessible acres of the 113 acre site. Hazardous material removal efforts have been focused and localized in and around the magazine, the shed near the main house, and the land areas around the main house. There haven't been any reported removal actions in the areas where MD was discovered during the October 4 and October 12, 2017 site visits. Due to the MD discoveries and the history of MEC, IEDs and explosive manufacturing that has occurred on this site, UXO Pro recommends, the site move to a surface and subsurface removal action.

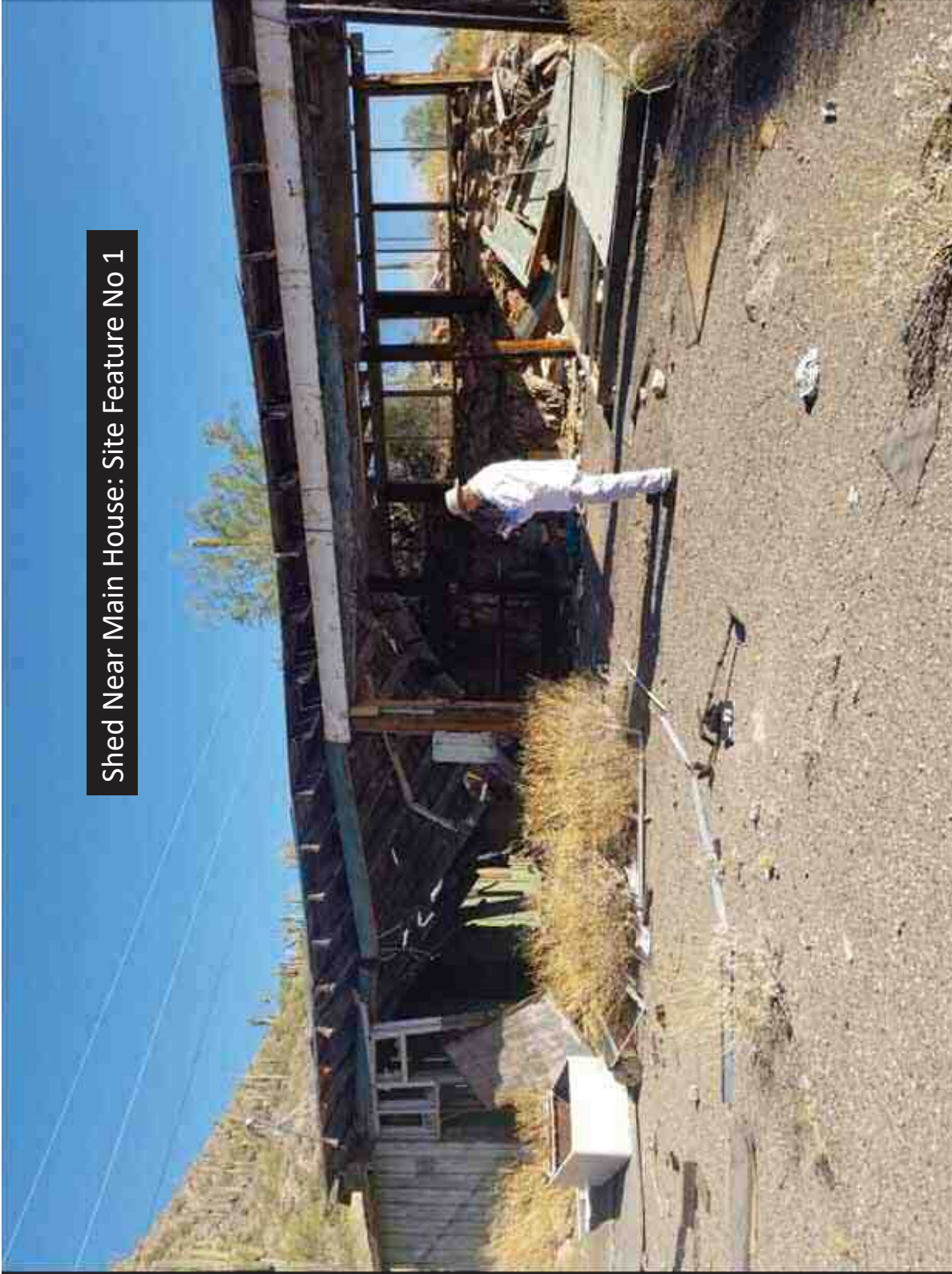
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Appendix A: Photograph Log

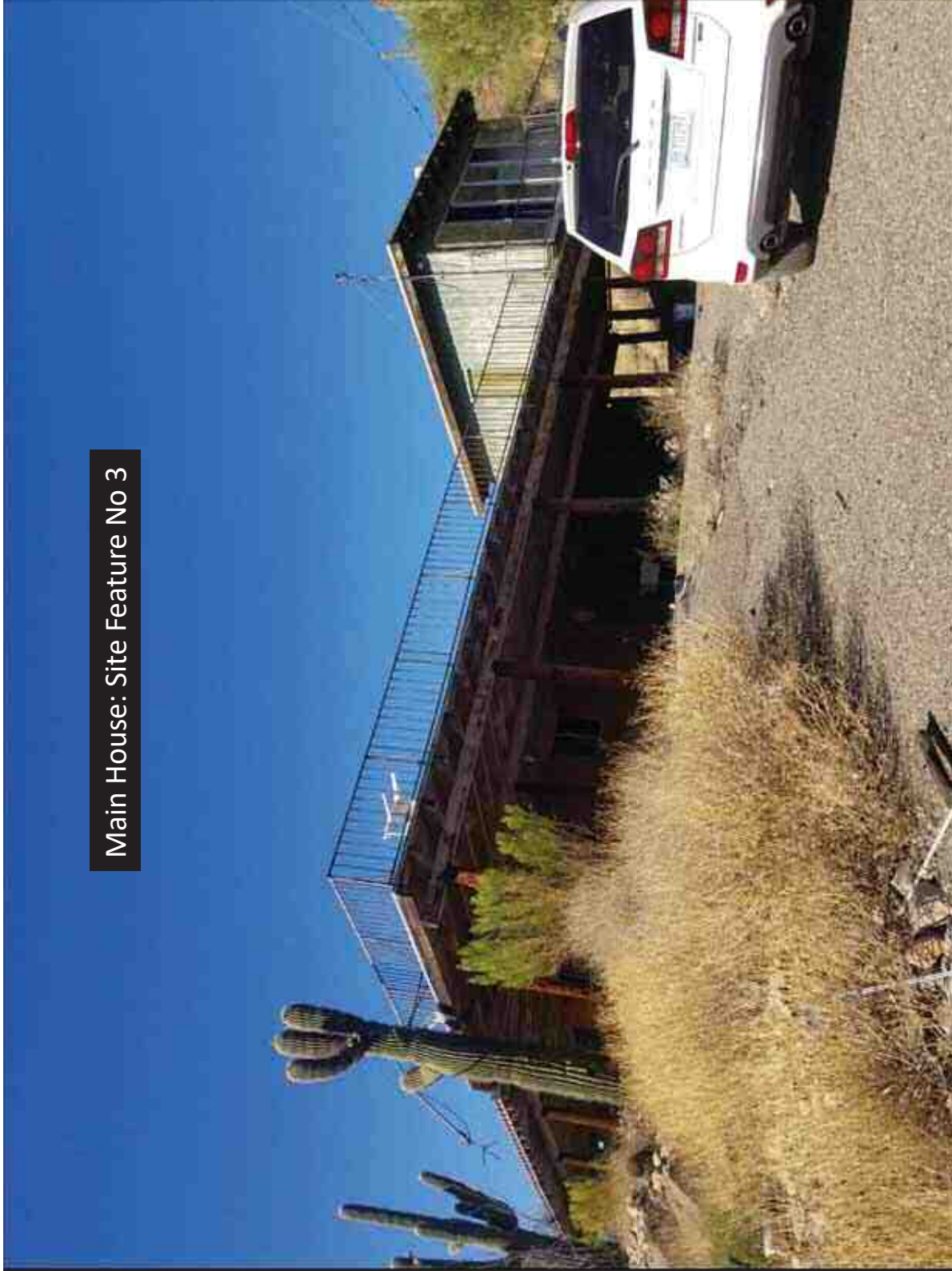
27th Ave Site Visit

October 4, 2017

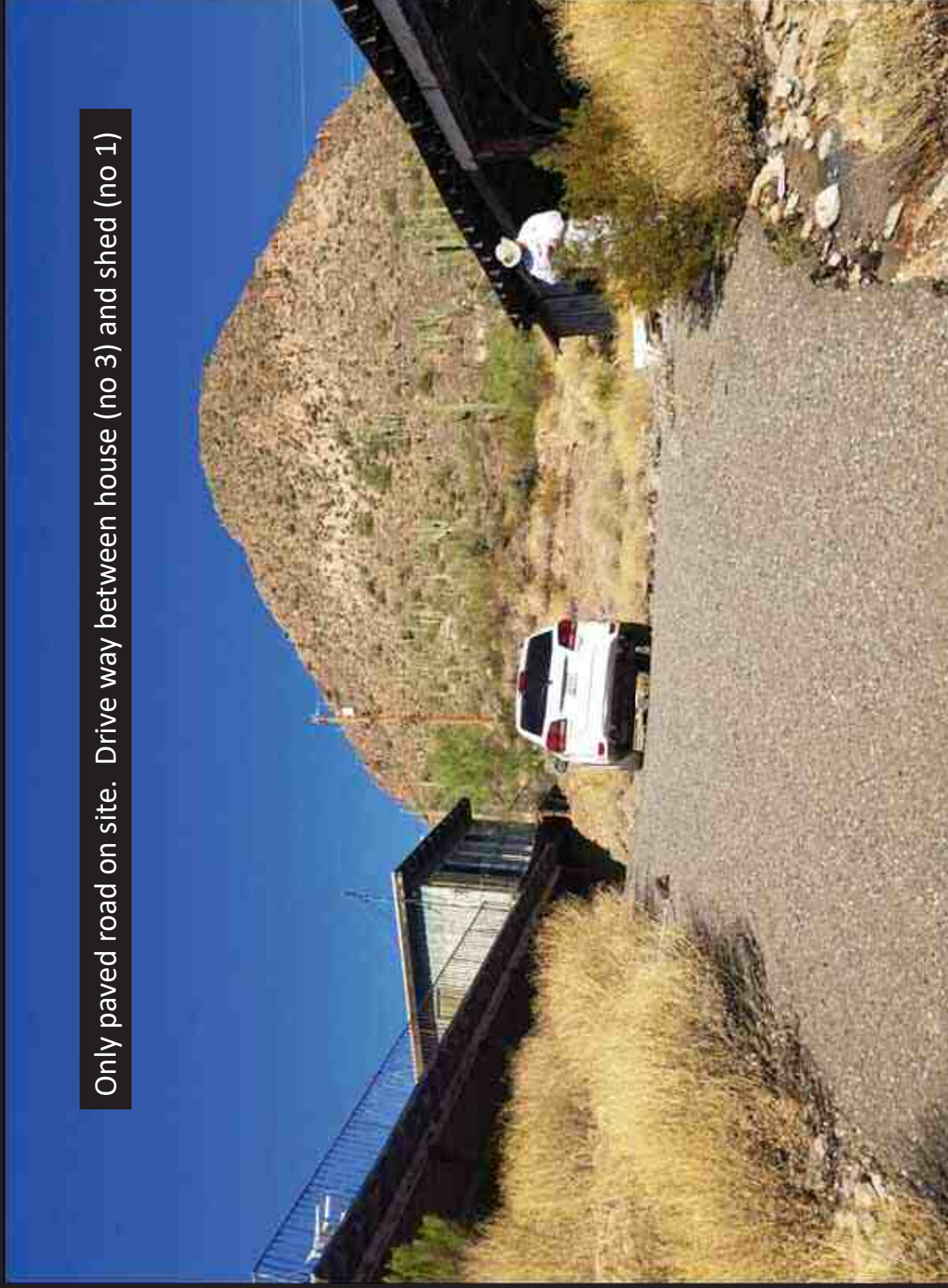
Shed Near Main House: Site Feature No 1



Main House: Site Feature No 3

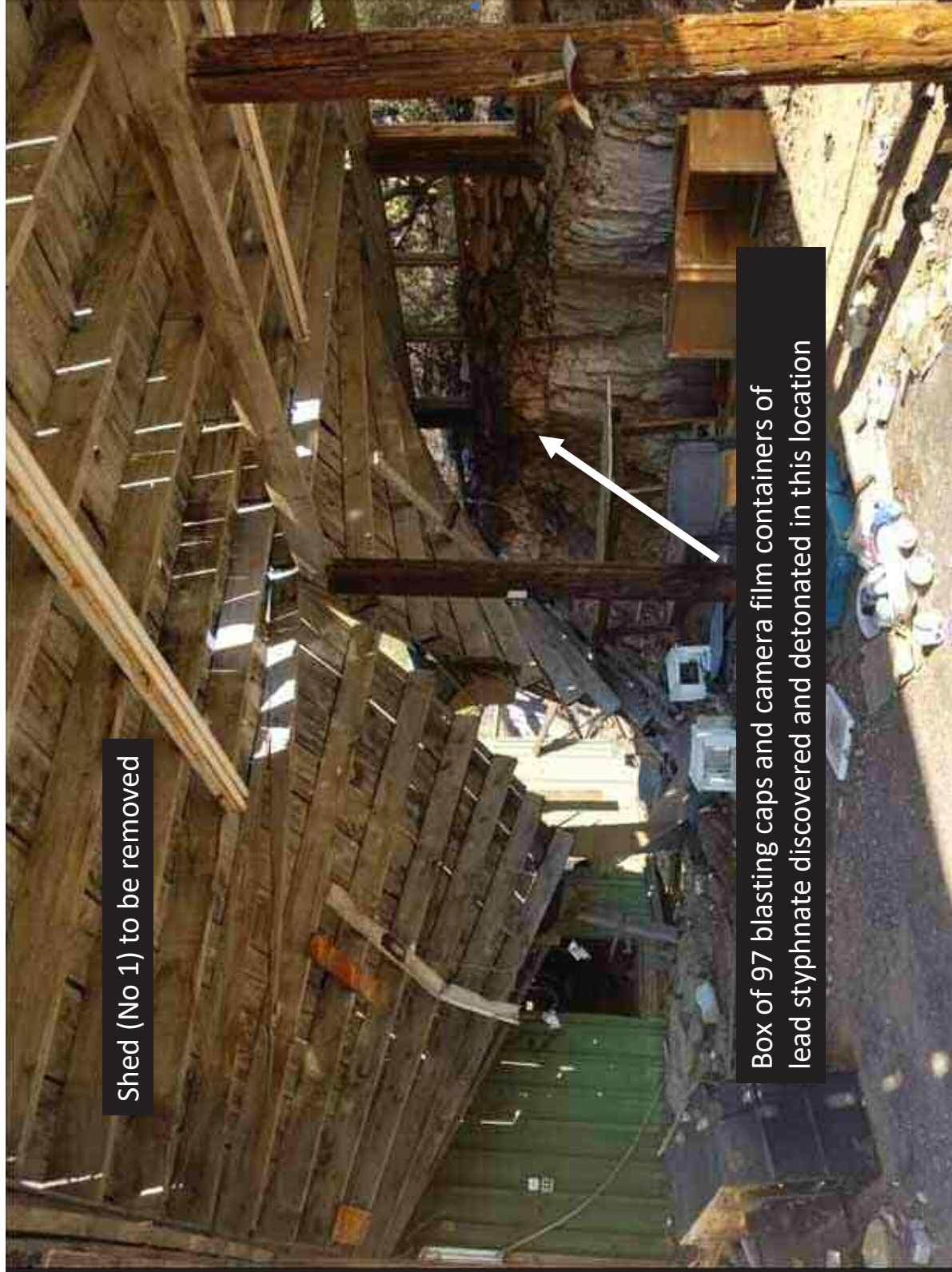


Only paved road on site. Drive way between house (no 3) and shed (no 1)

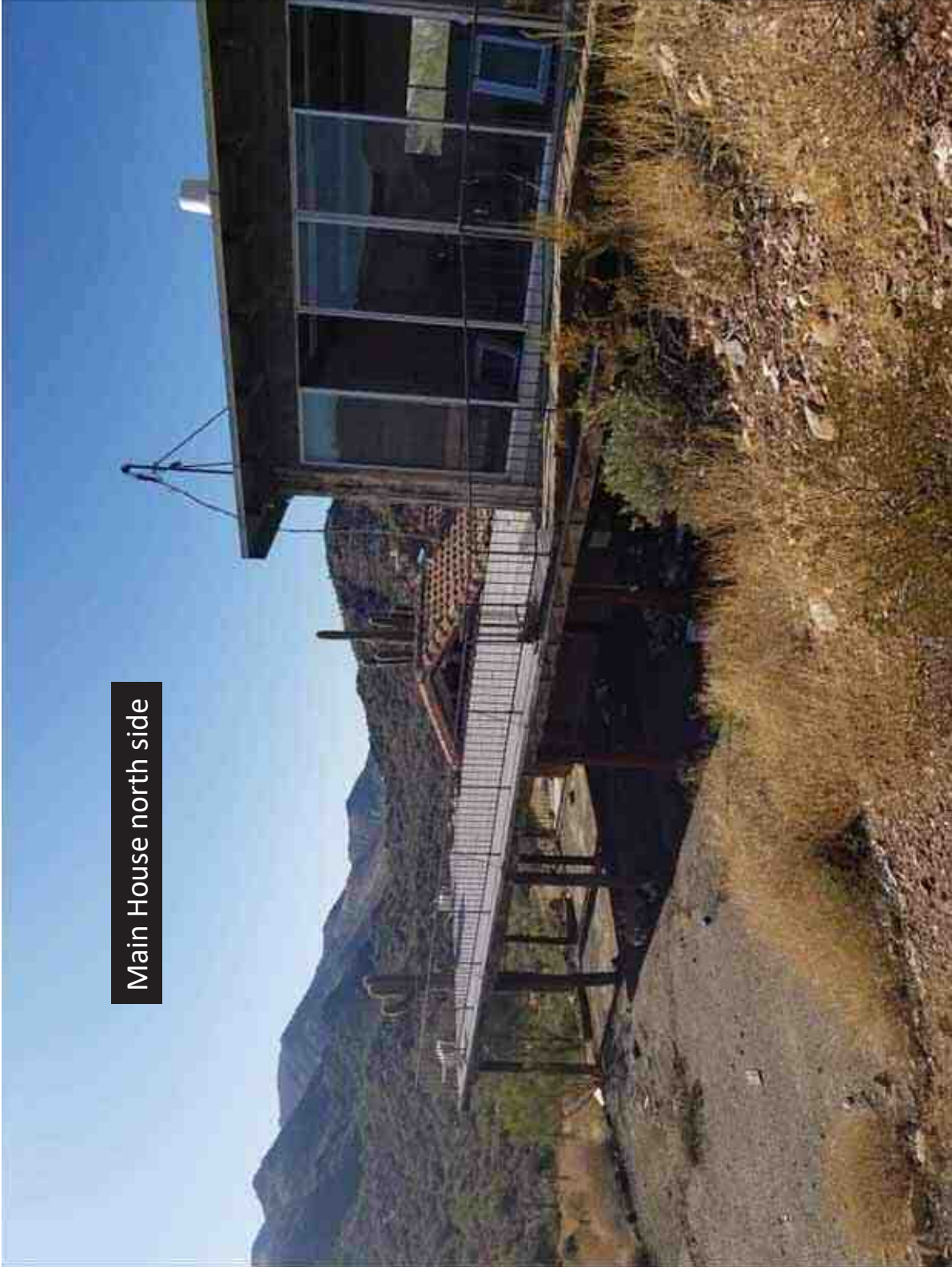


Shed (No 1) to be removed

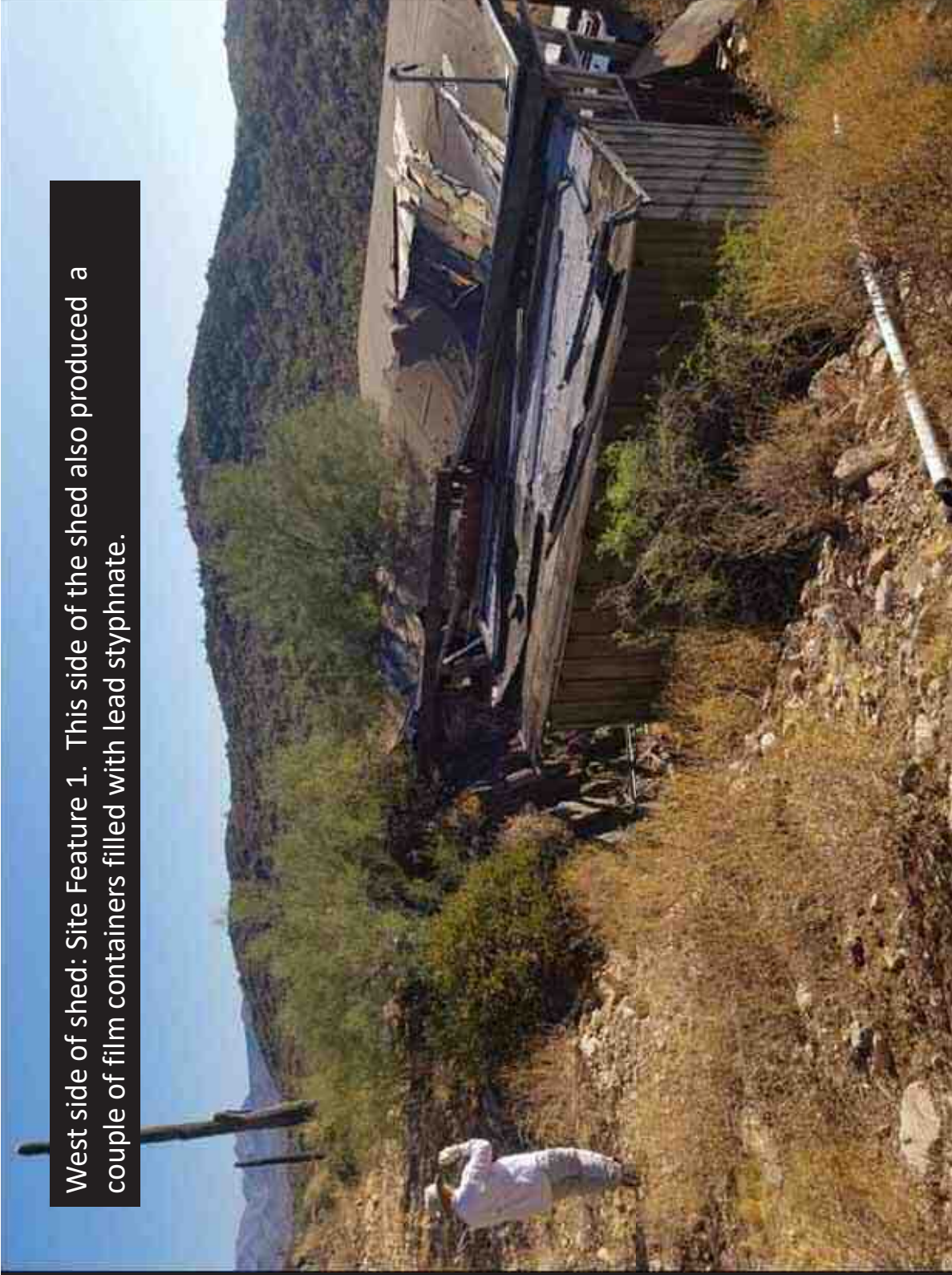
Box of 97 blasting caps and camera film containers of lead styphnate discovered and detonated in this location



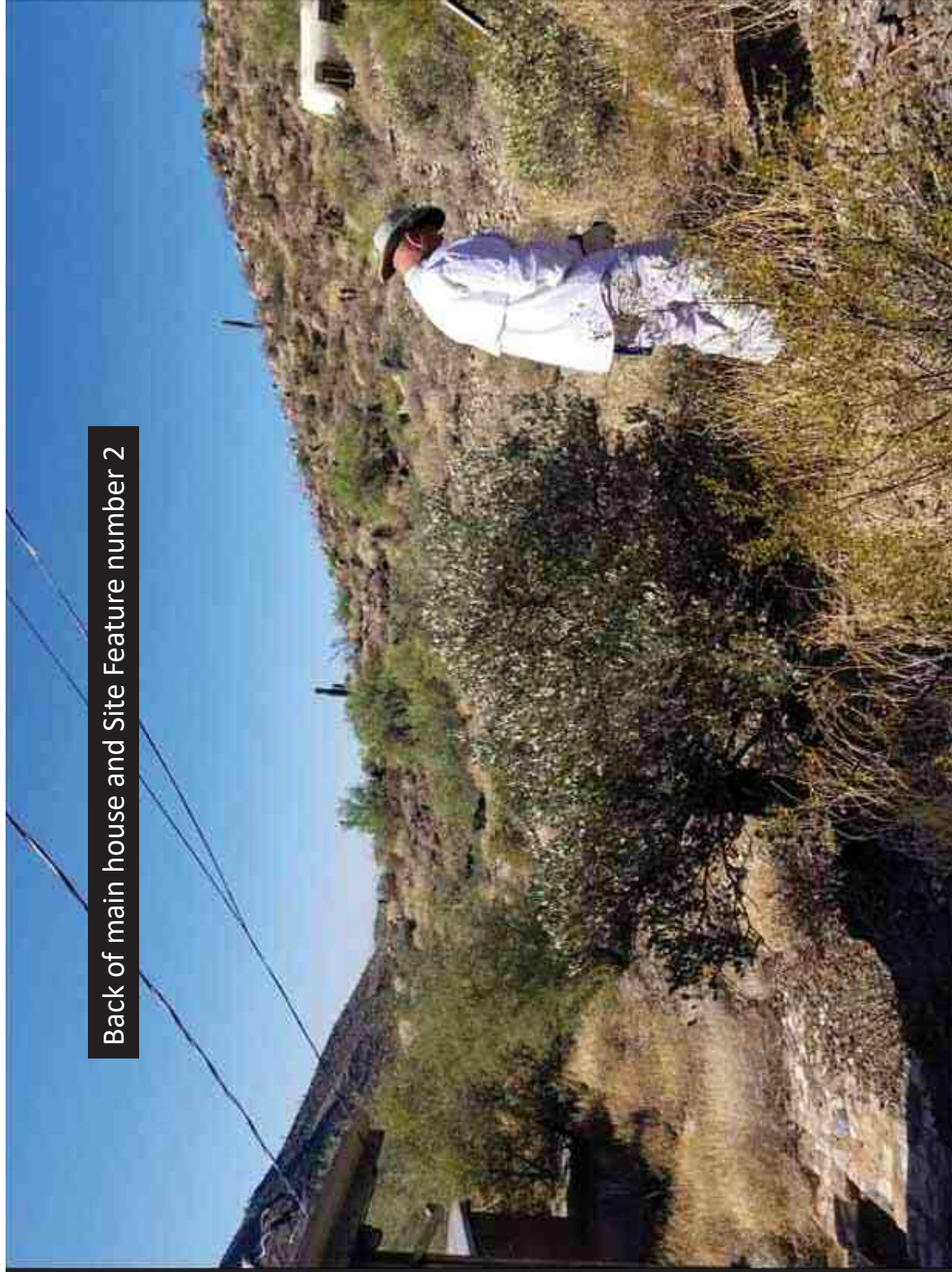
Main House north side



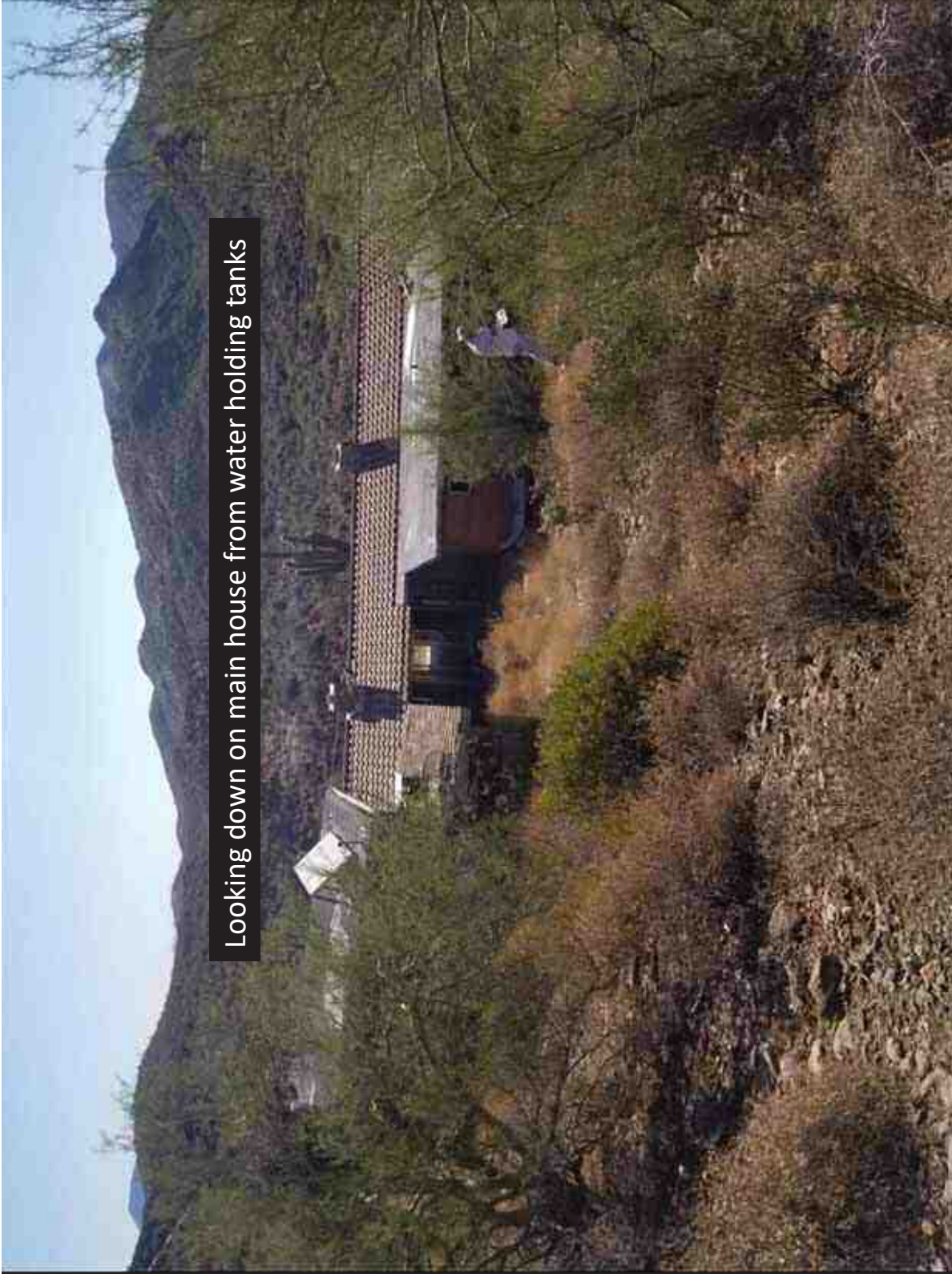
West side of shed: Site Feature 1. This side of the shed also produced a couple of film containers filled with lead styphnate.

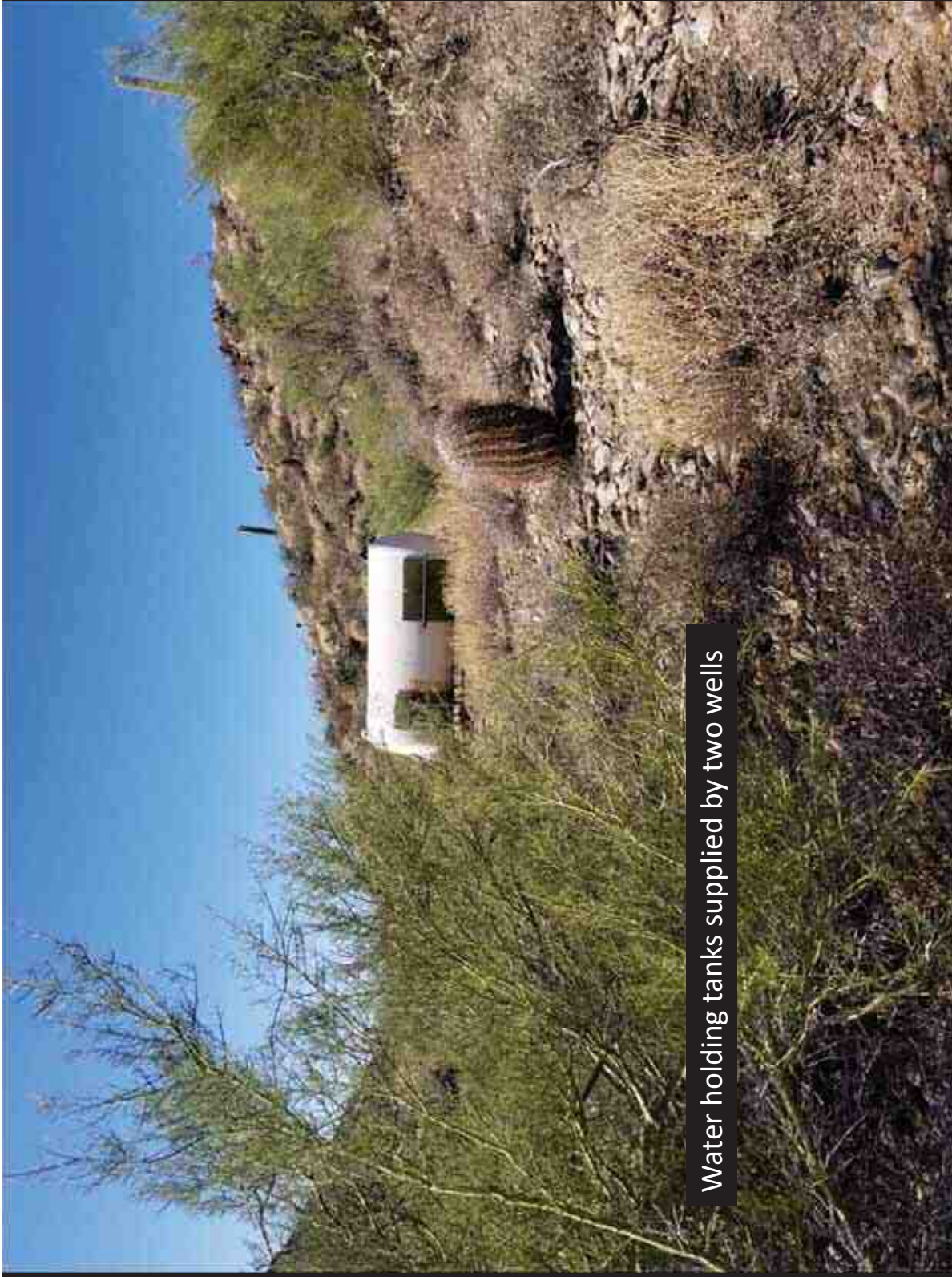


Back of main house and Site Feature number 2



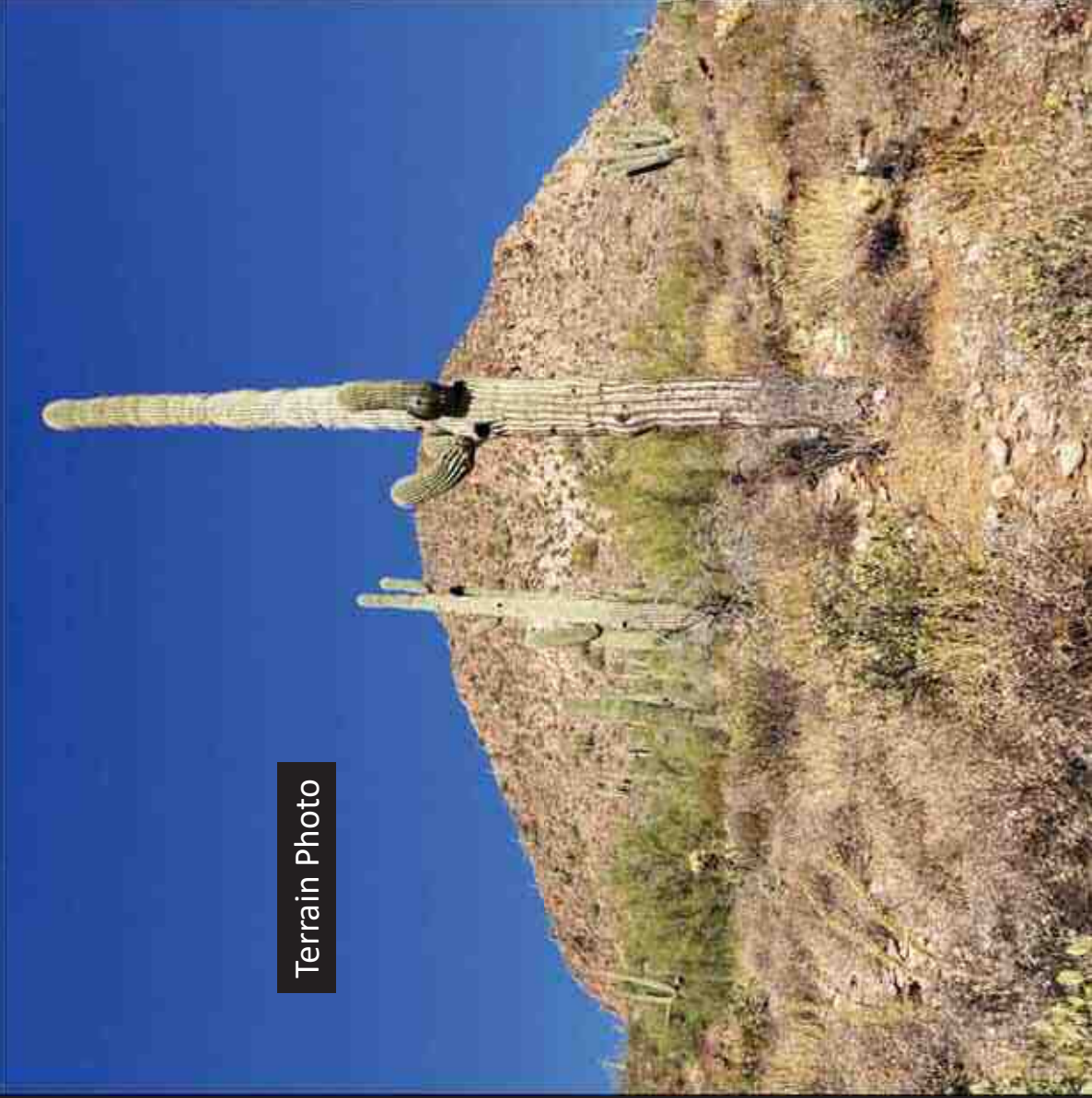
Looking down on main house from water holding tanks



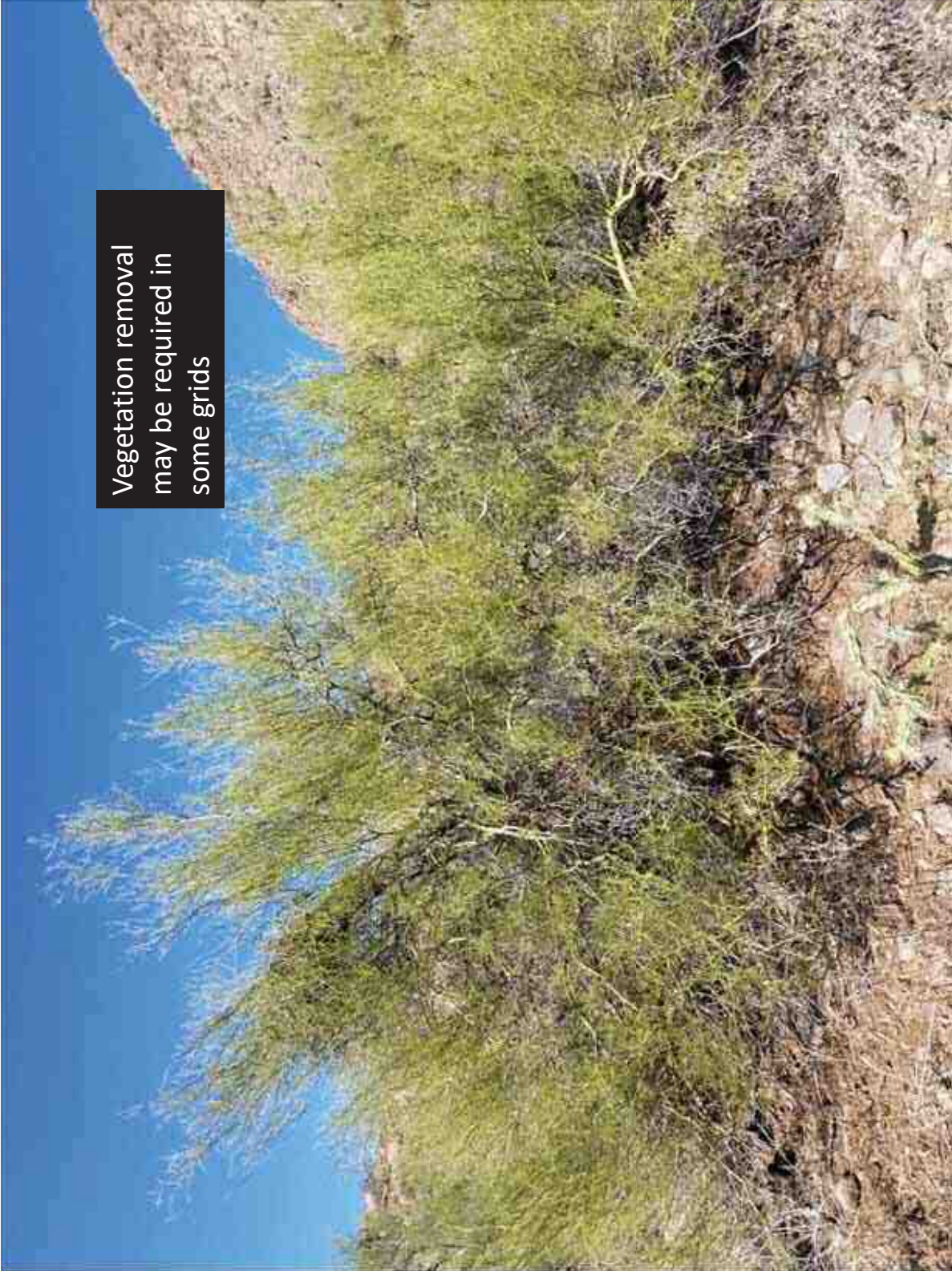


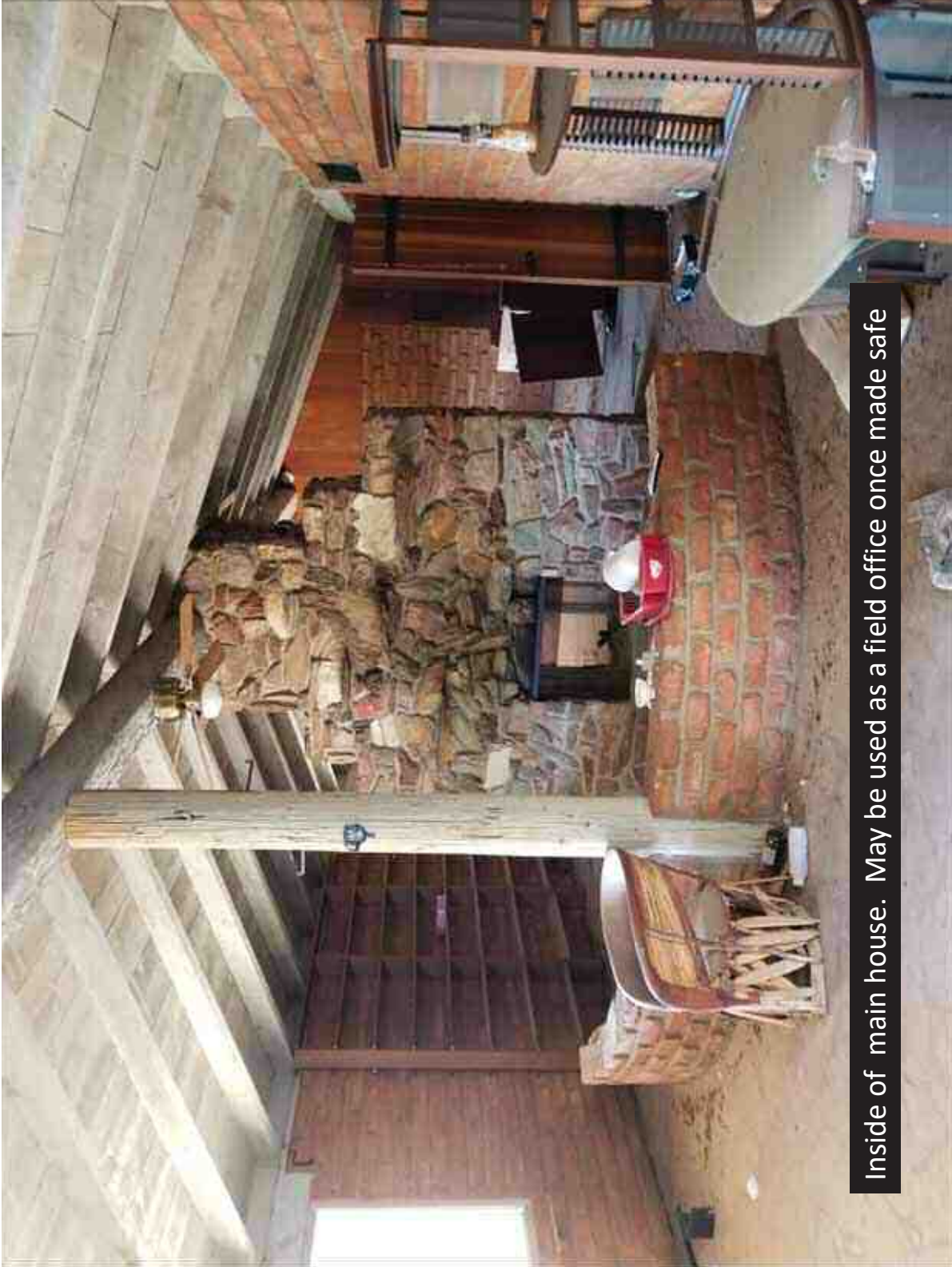
Water holding tanks supplied by two wells

Terrain Photo

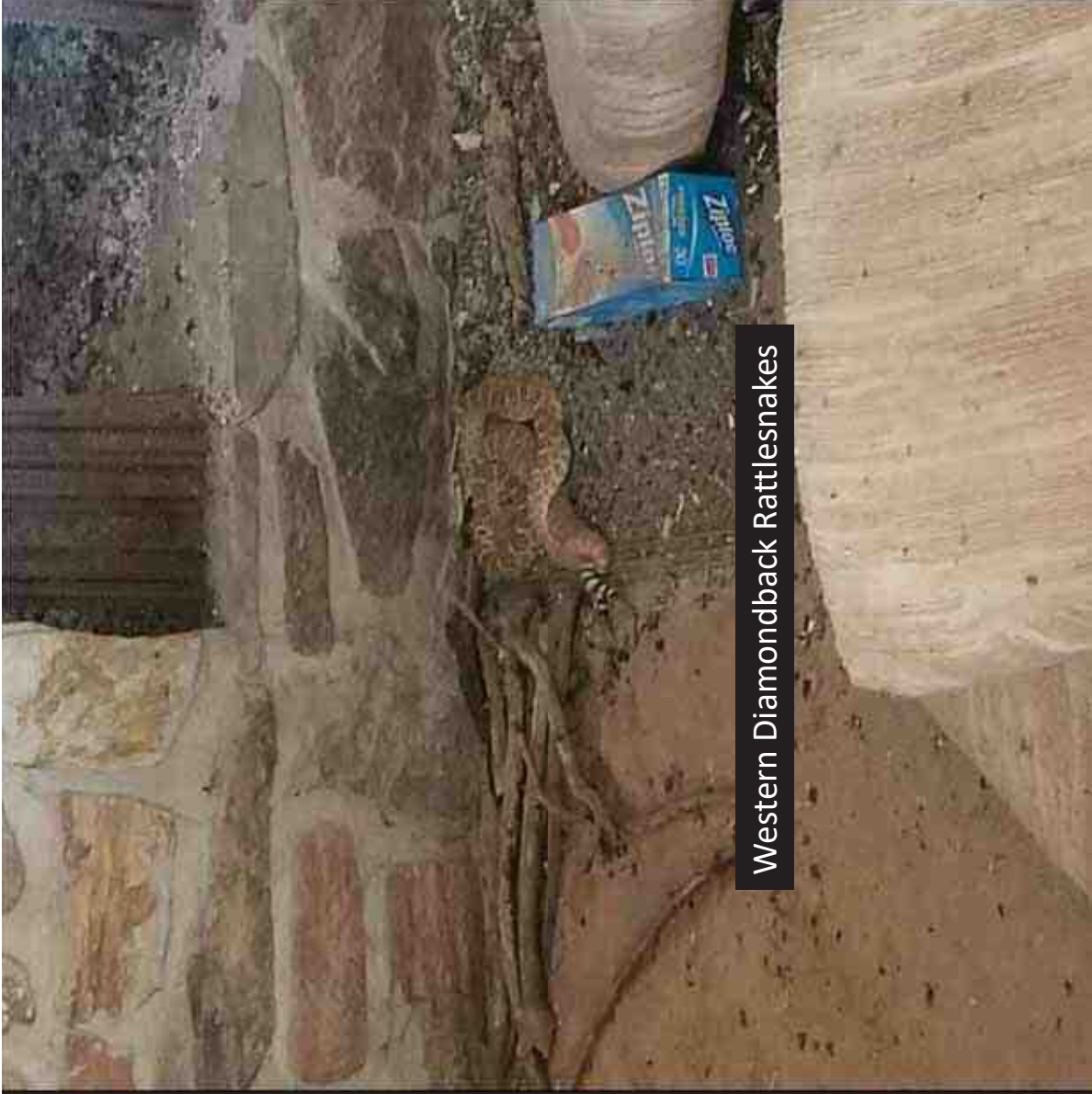


Vegetation removal
may be required in
some grids

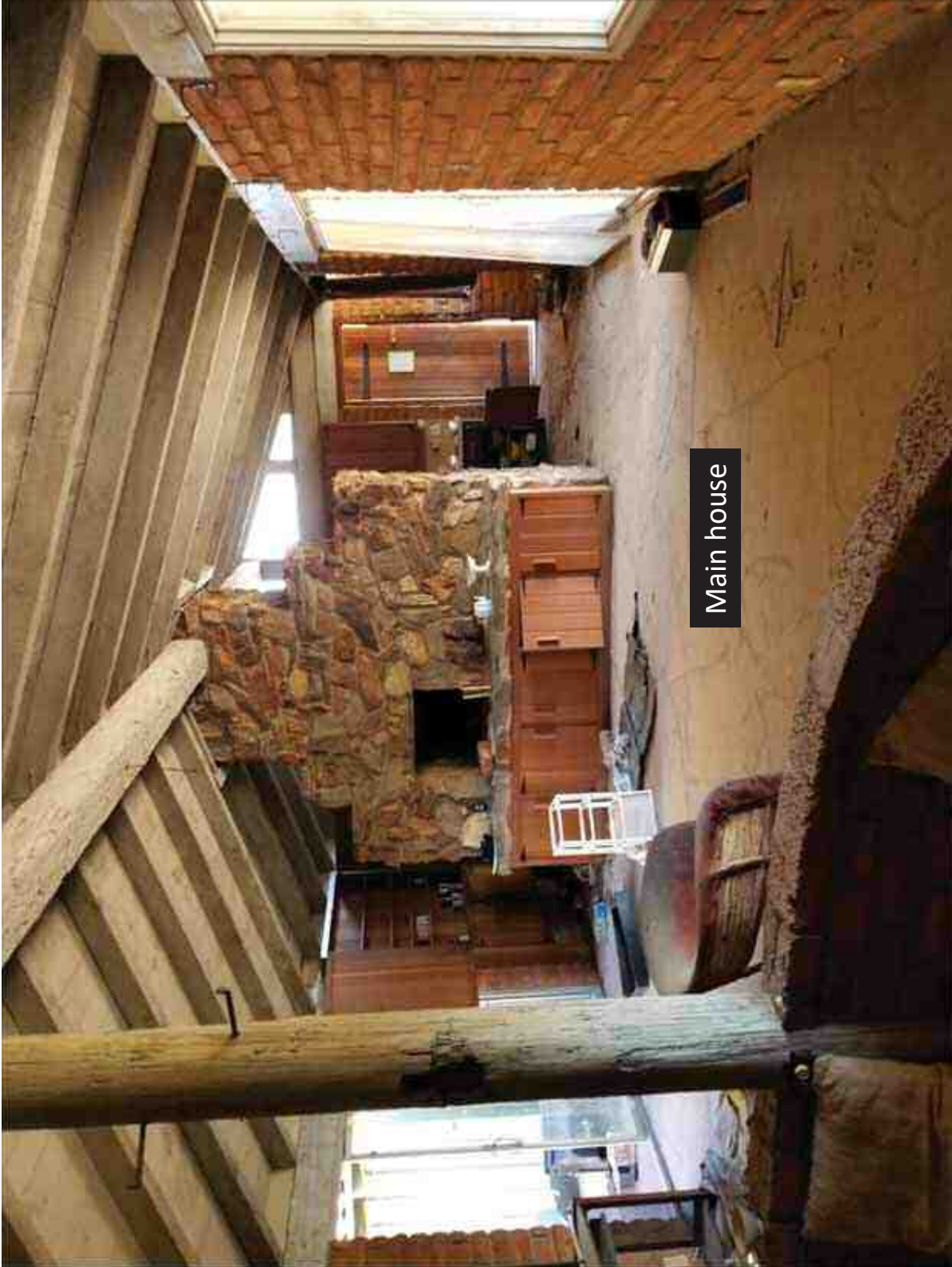




Inside of main house. May be used as a field office once made safe



Western Diamondback Rattlesnakes

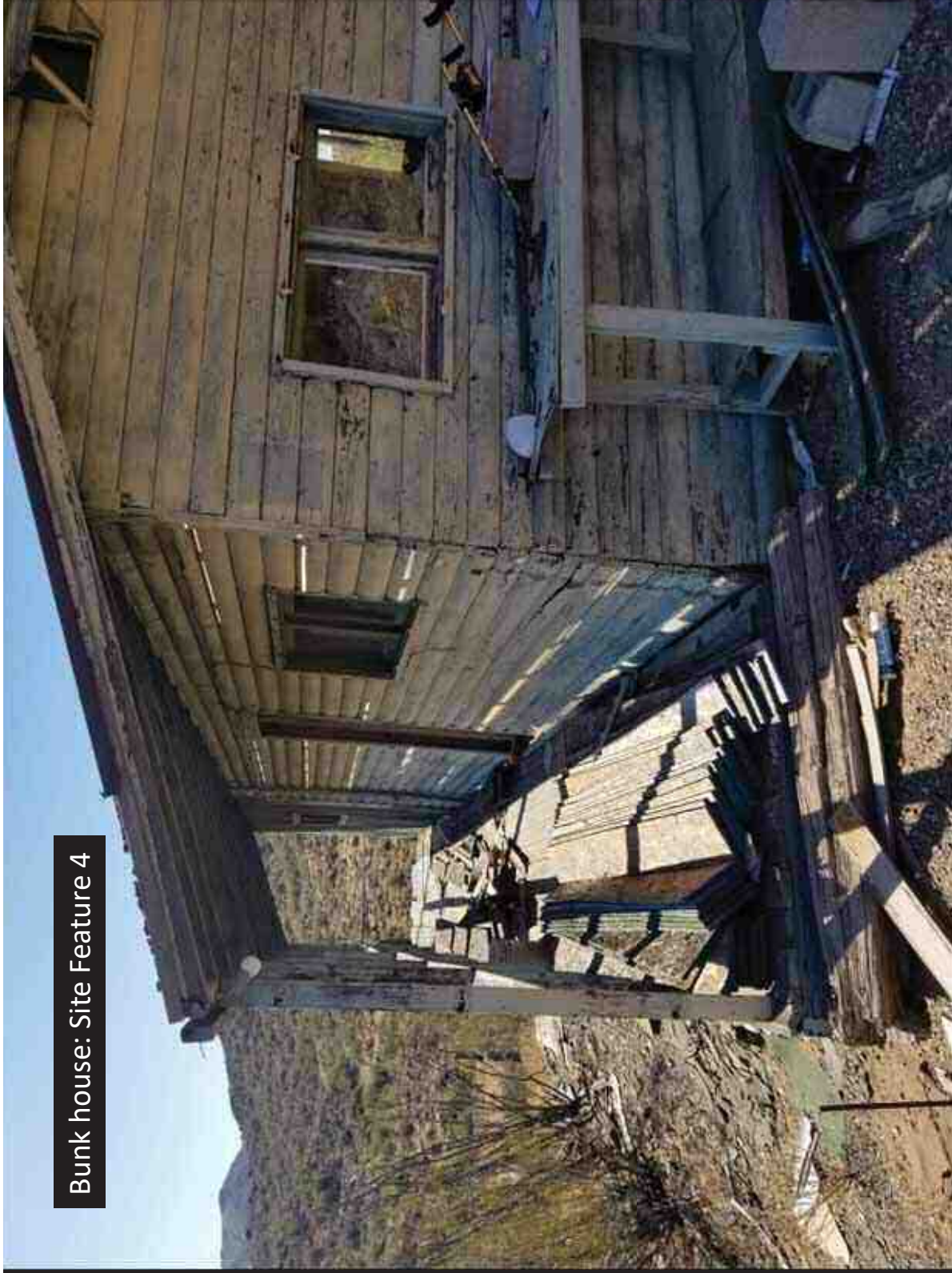


Main house

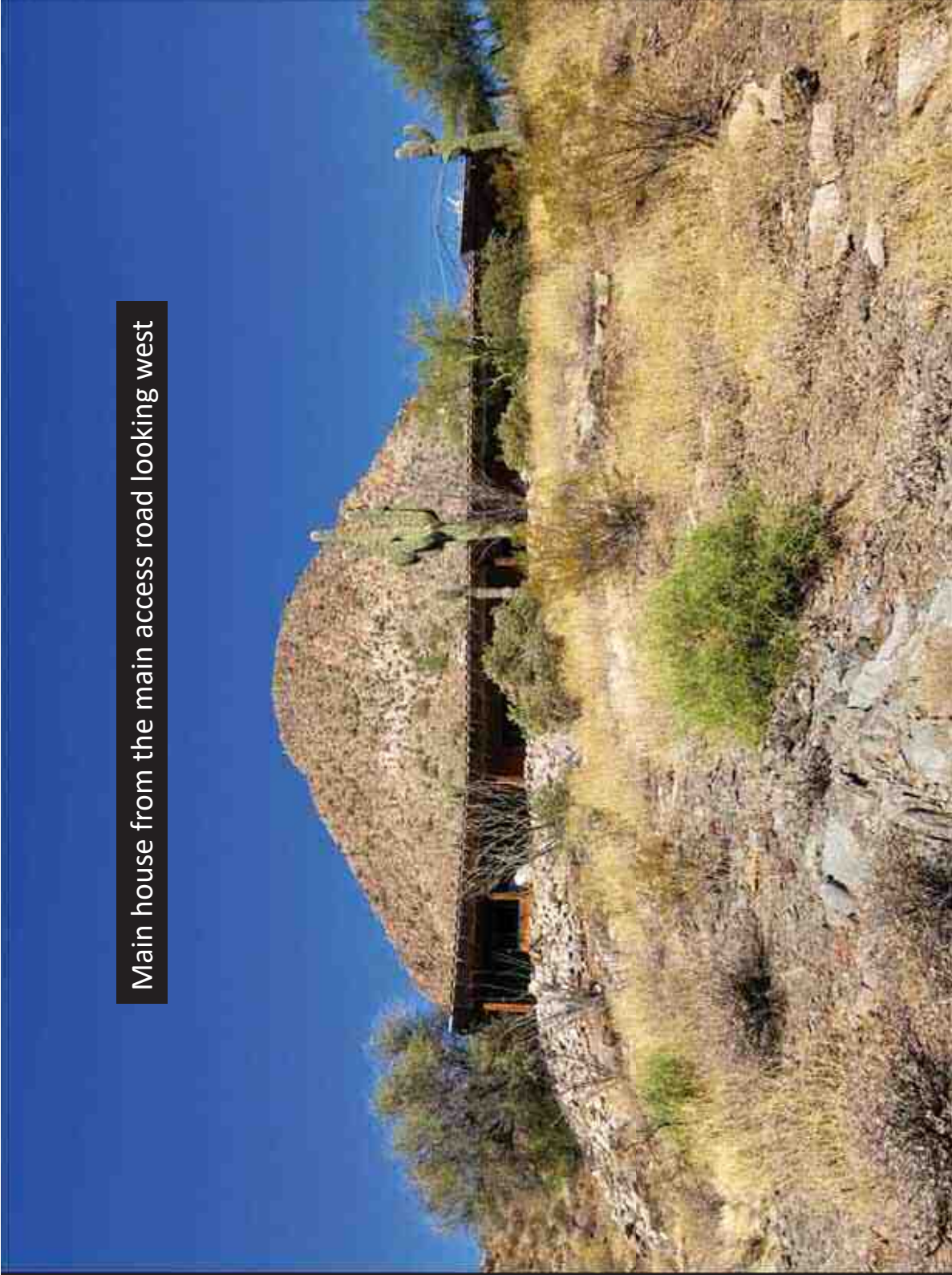


Main house

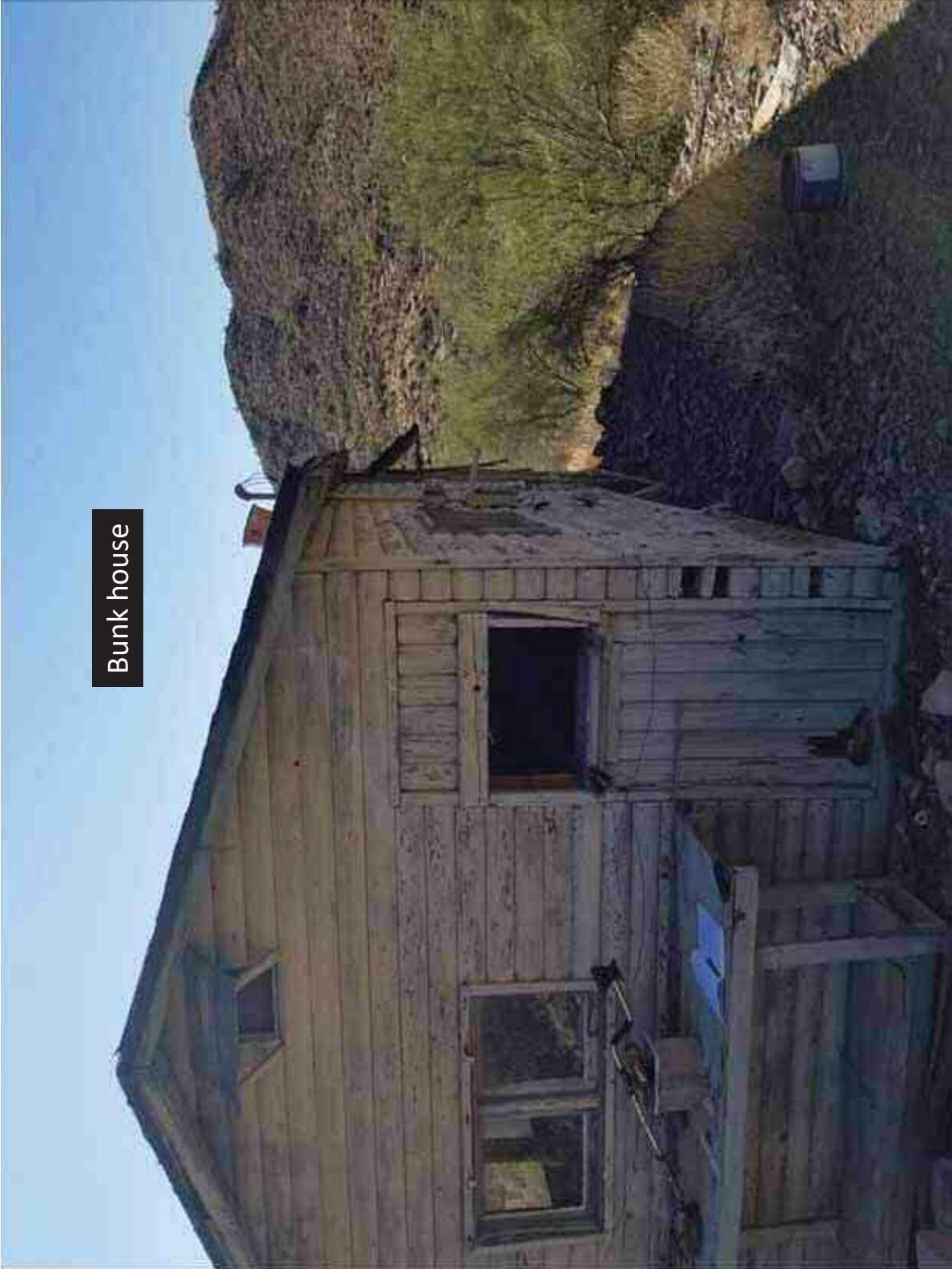
Bunk house: Site Feature 4



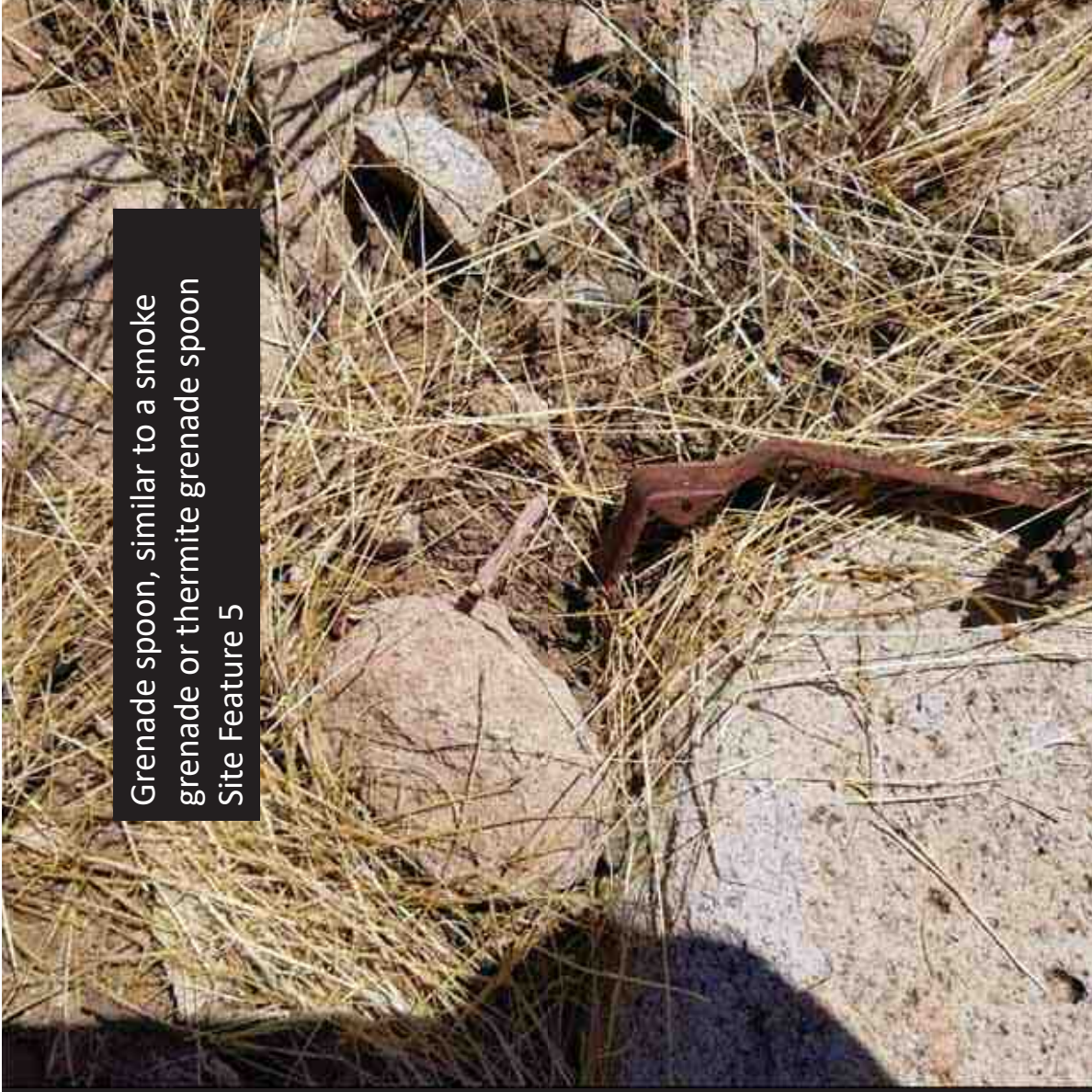
Main house from the main access road looking west



Bunk house

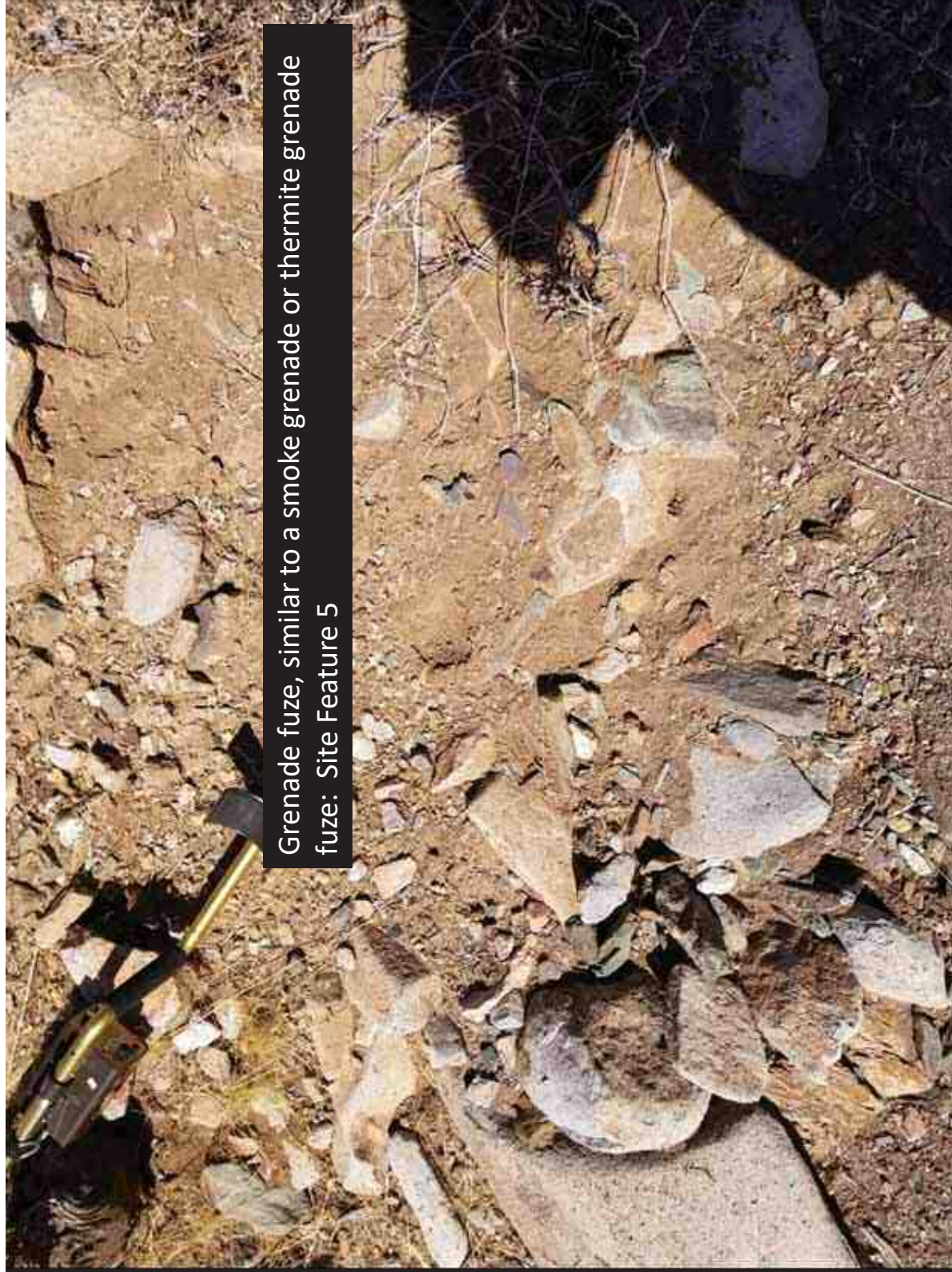


Grenade spoon, similar to a smoke
grenade or thermite grenade spoon
Site Feature 5



Grenade fuze, similar to a smoke grenade or thermite grenade
fuze: Site Feature 5



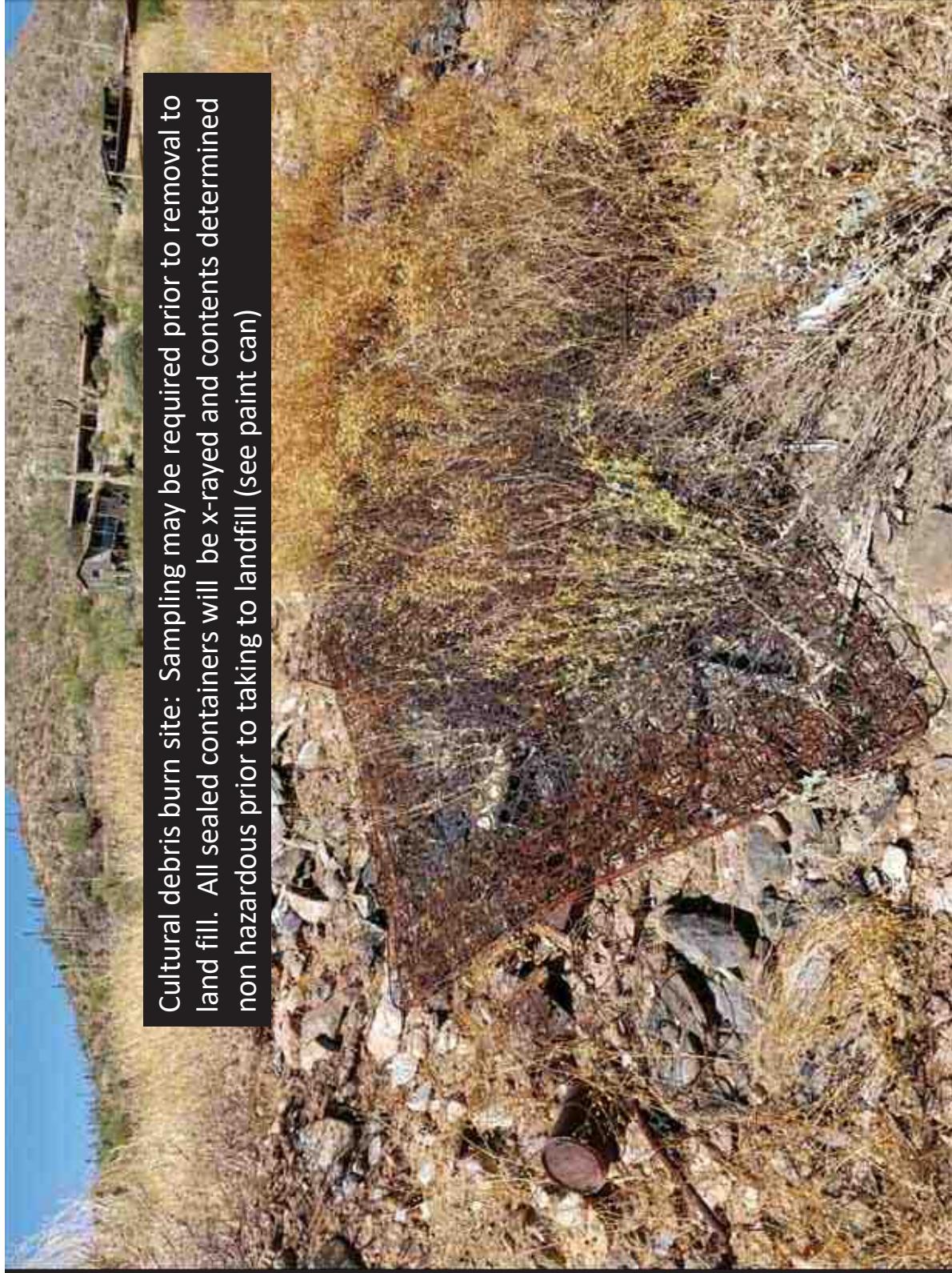


Grenade fuze, similar to a smoke grenade or thermite grenade fuze: Site Feature 5

Grenade fuze, similar to a smoke grenade or thermite grenade
fuze: Site Feature 5



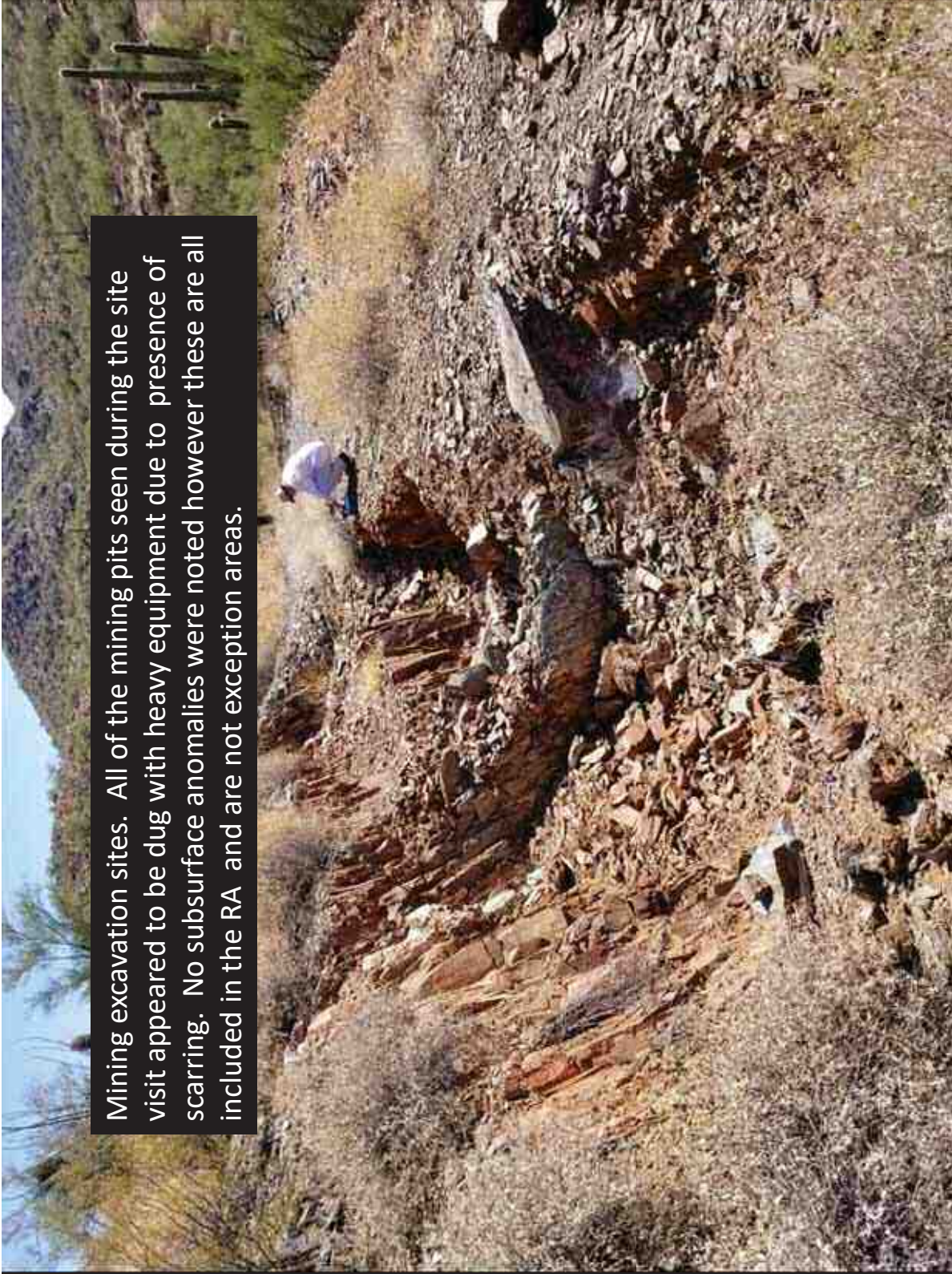
Cultural debris burn site: Sampling may be required prior to removal to land fill. All sealed containers will be x-rayed and contents determined non hazardous prior to taking to landfill (see paint can)

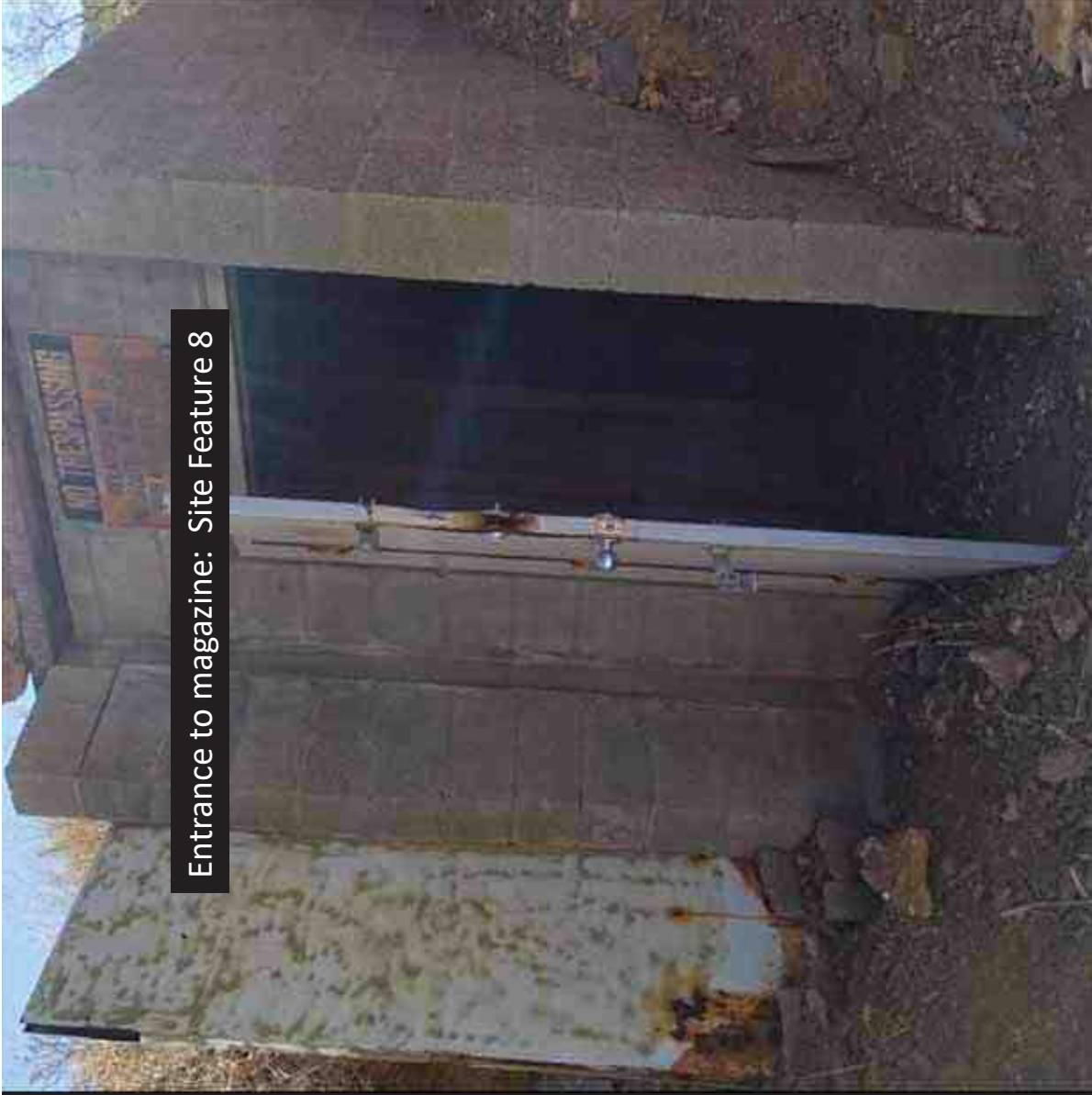


Mining excavation site



Mining excavation sites. All of the mining pits seen during the site visit appeared to be dug with heavy equipment due to presence of scarring. No subsurface anomalies were noted however these are all included in the RA and are not exception areas.



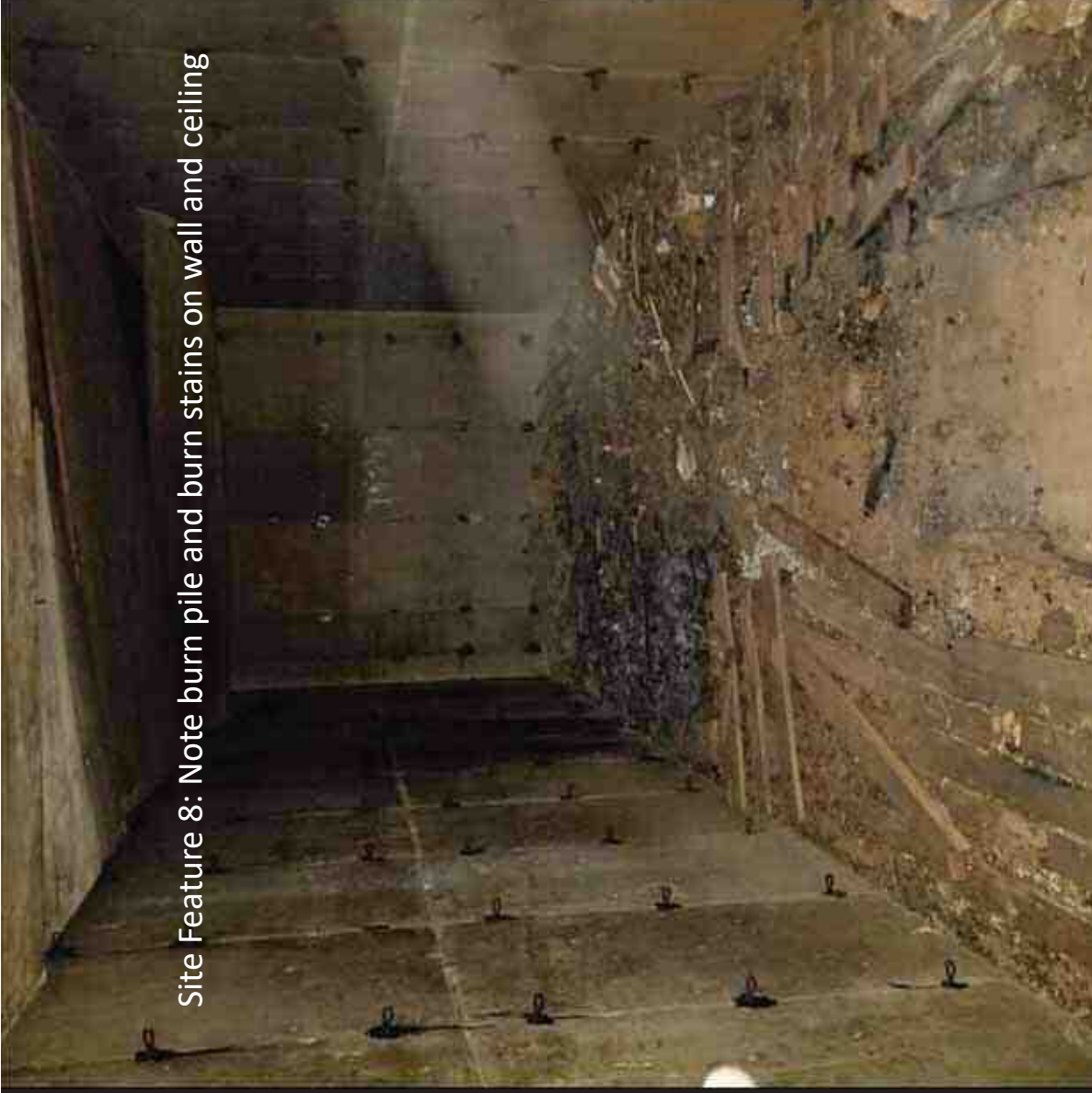


Entrance to magazine: Site Feature 8

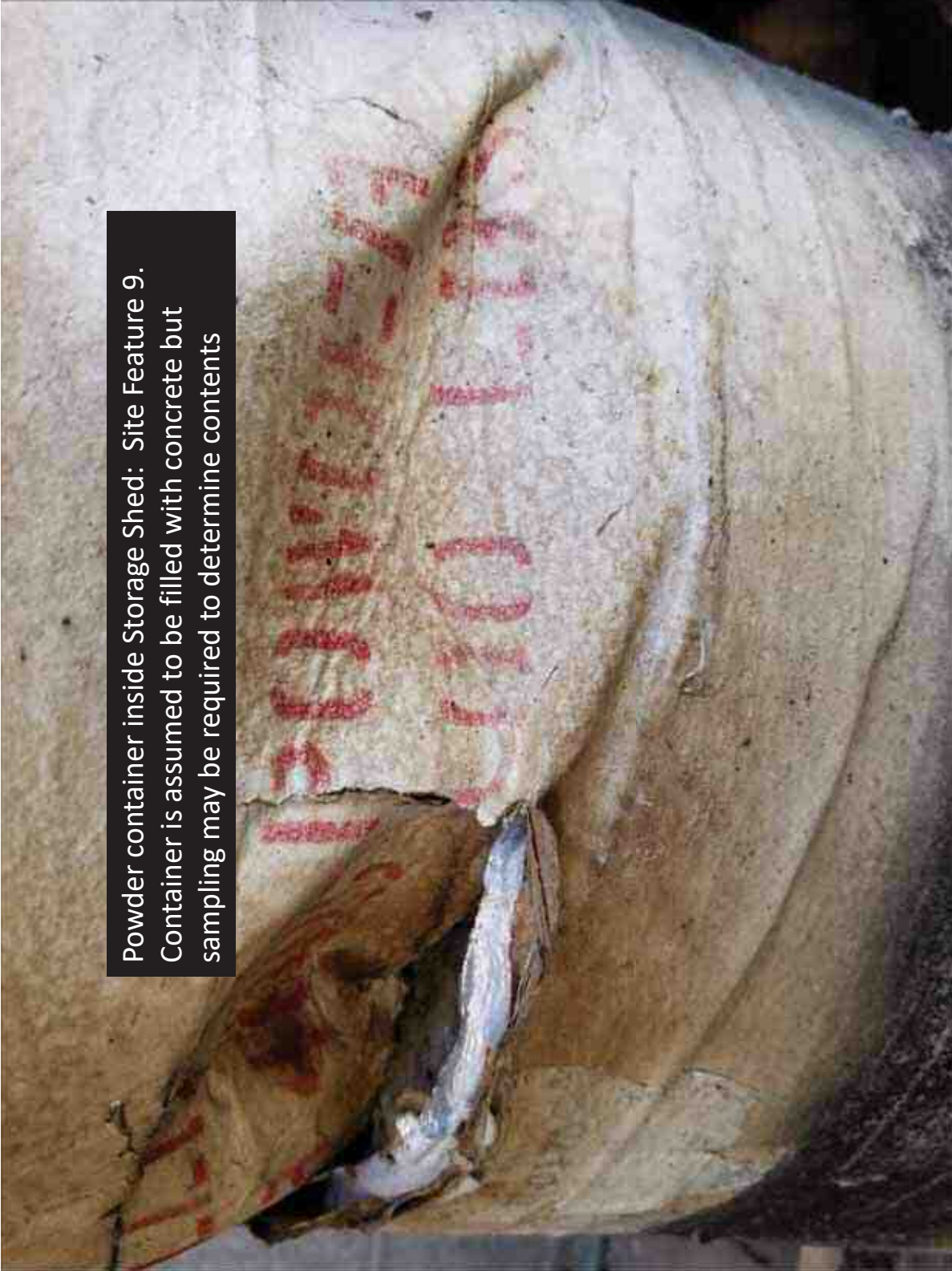
Site Feature 8:

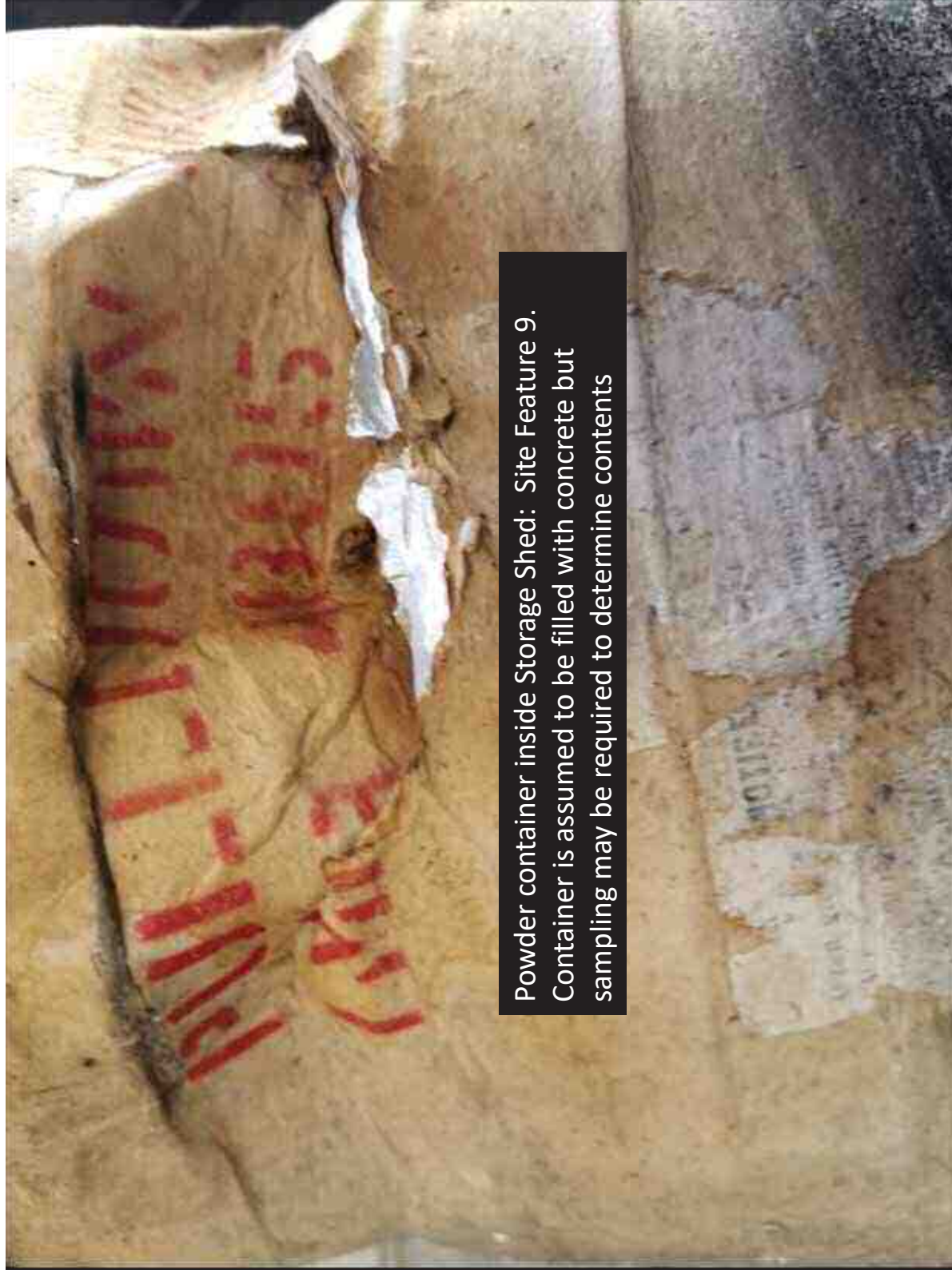


Site Feature 8: Note burn pile and burn stains on wall and ceiling

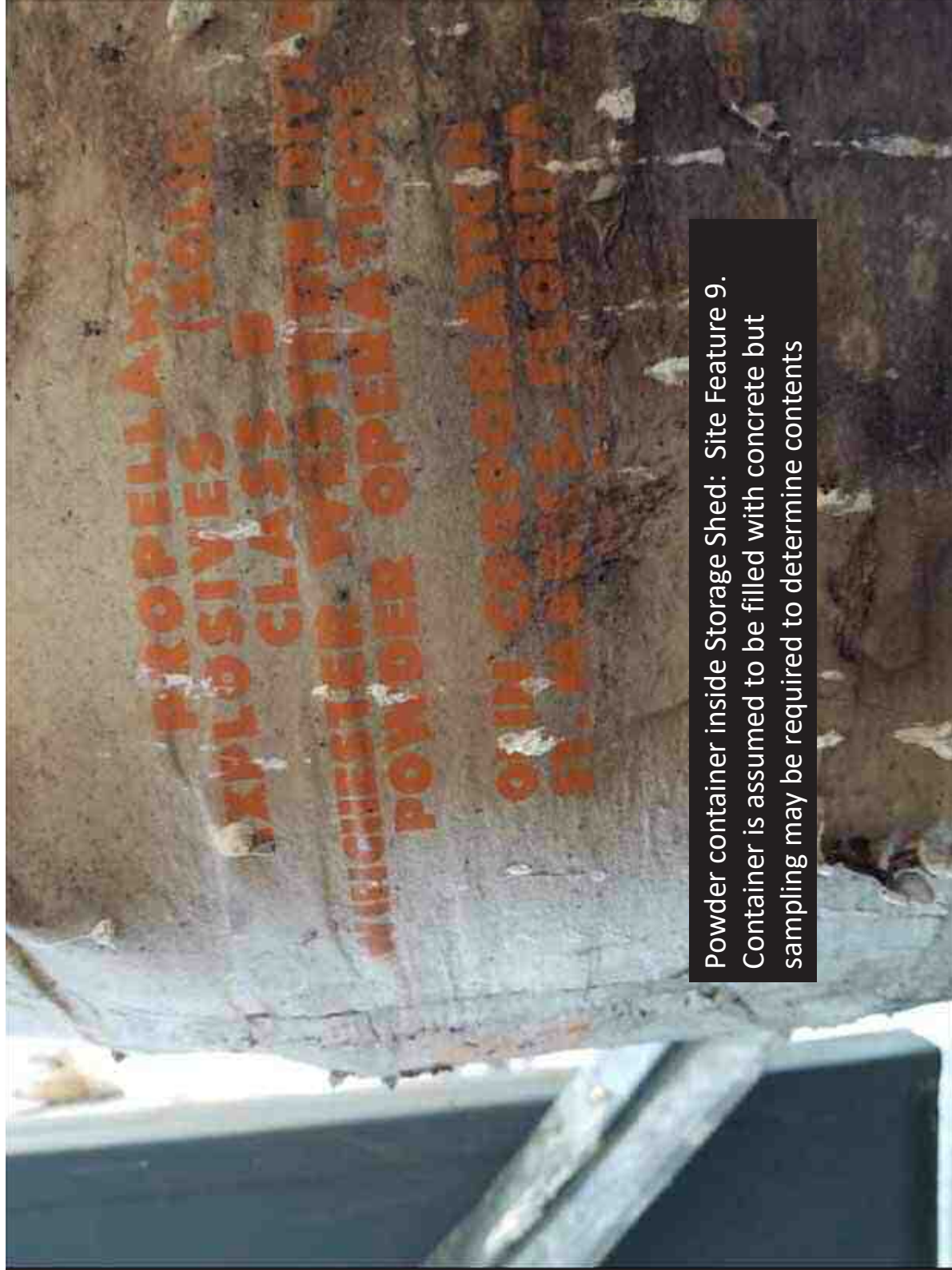


Powder container inside Storage Shed: Site Feature 9.
Container is assumed to be filled with concrete but
sampling may be required to determine contents



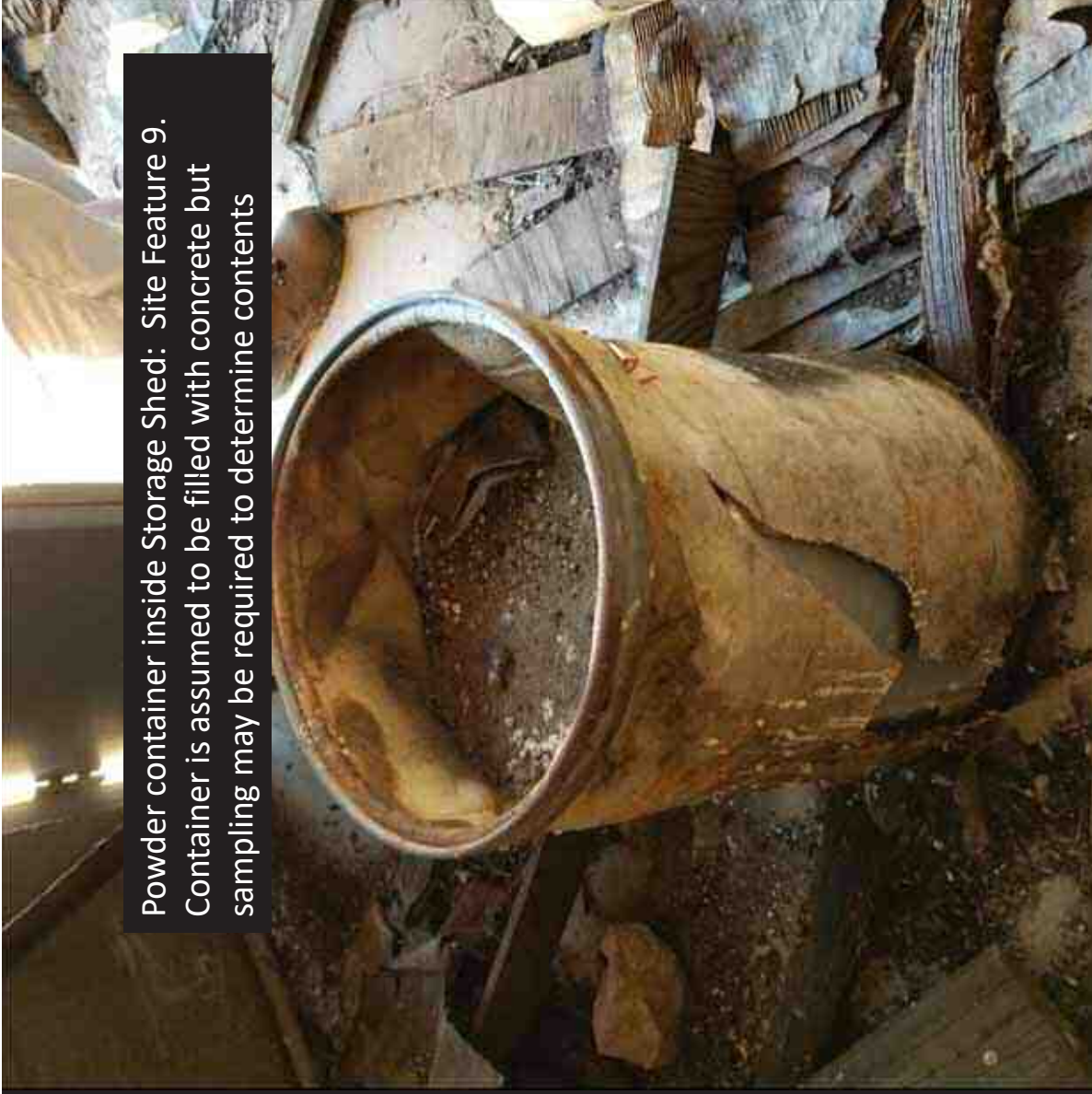


Powder container inside Storage Shed: Site Feature 9.
Container is assumed to be filled with concrete but
sampling may be required to determine contents



Powder container inside Storage Shed: Site Feature 9.
Container is assumed to be filled with concrete but
sampling may be required to determine contents

Powder container inside Storage Shed: Site Feature 9.
Container is assumed to be filled with concrete but
sampling may be required to determine contents



Storage Shed: Site Feature 9. Building is recommended for removal





Storage Shed

Storage Shed with possible flash bang bodies (empty) and frag sleeves





Storage Shed



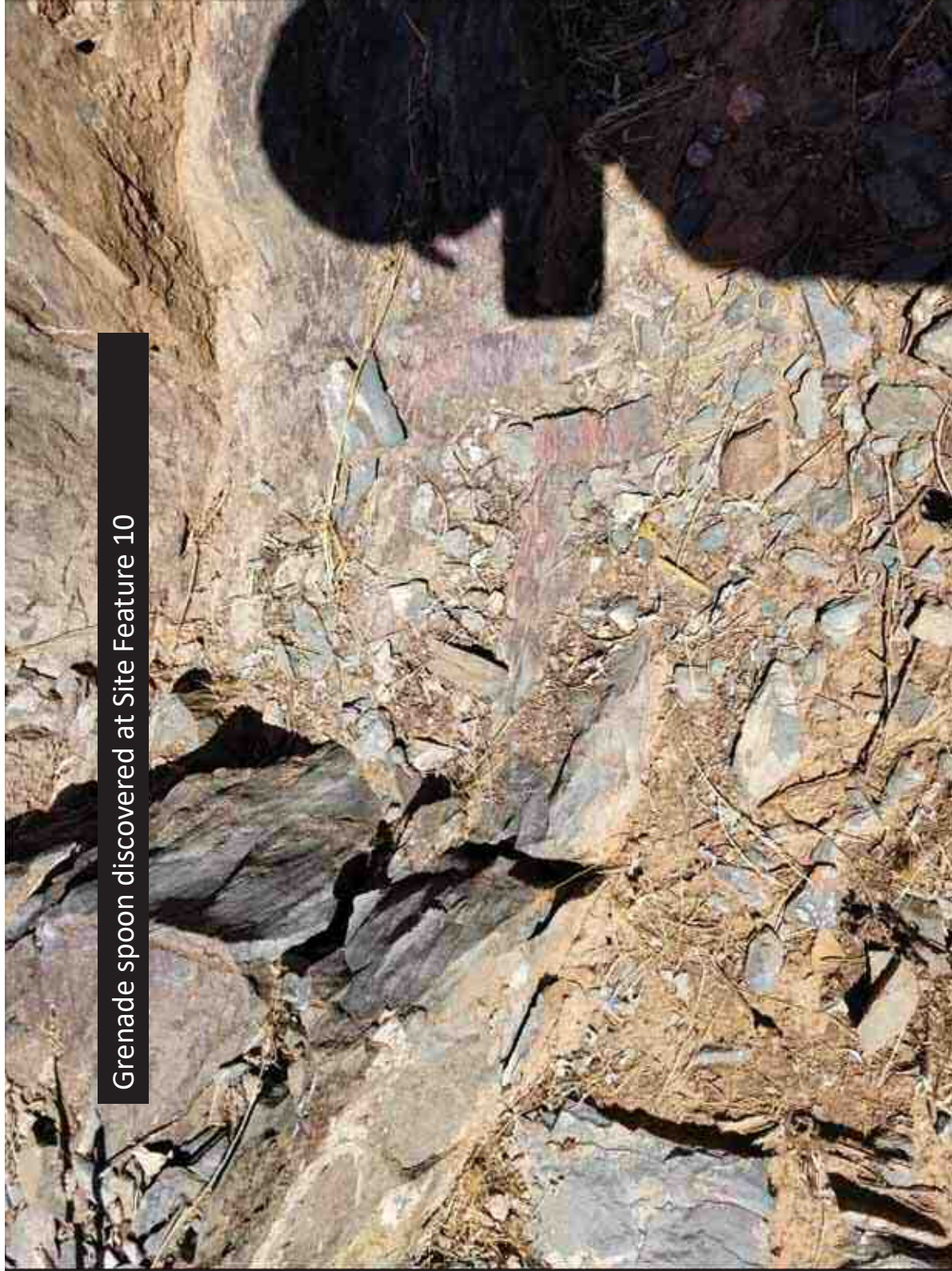
Storage Shed



Grenade spoon discovered at Site Feature 10



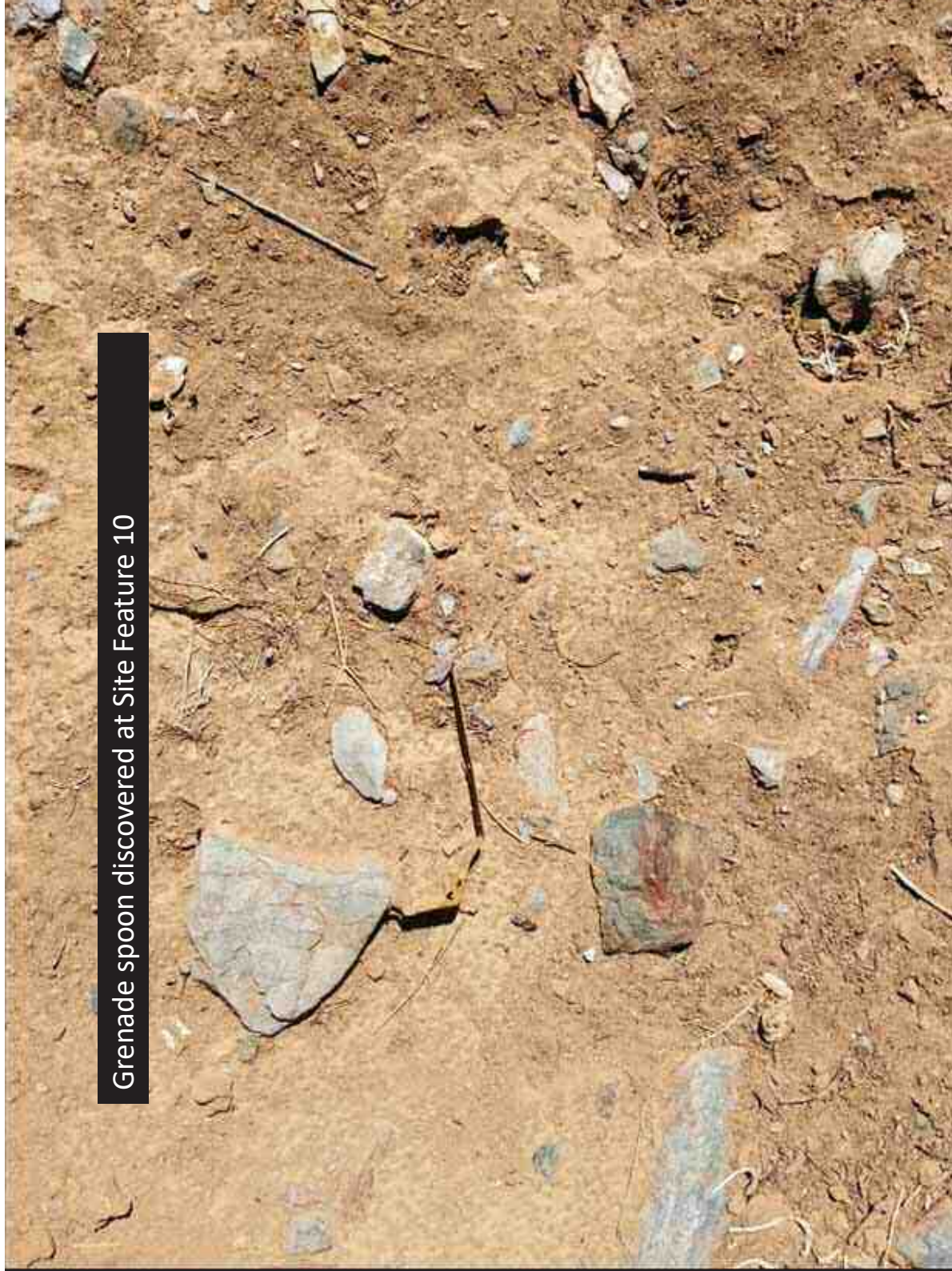
Grenade spoon discovered at Site Feature 10



Grenade fuze discovered at Site Feature 10

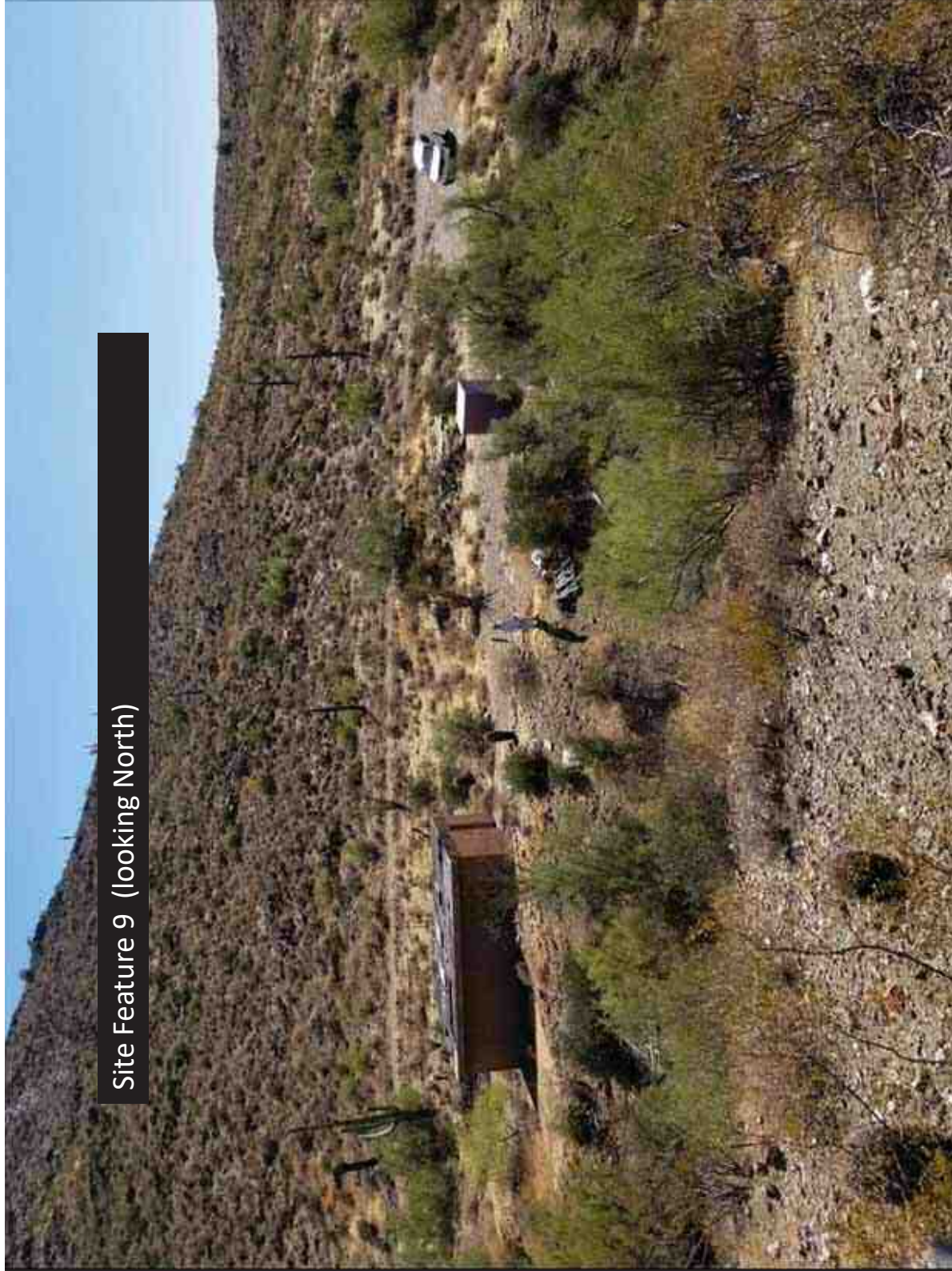


Grenade spoon discovered at Site Feature 10





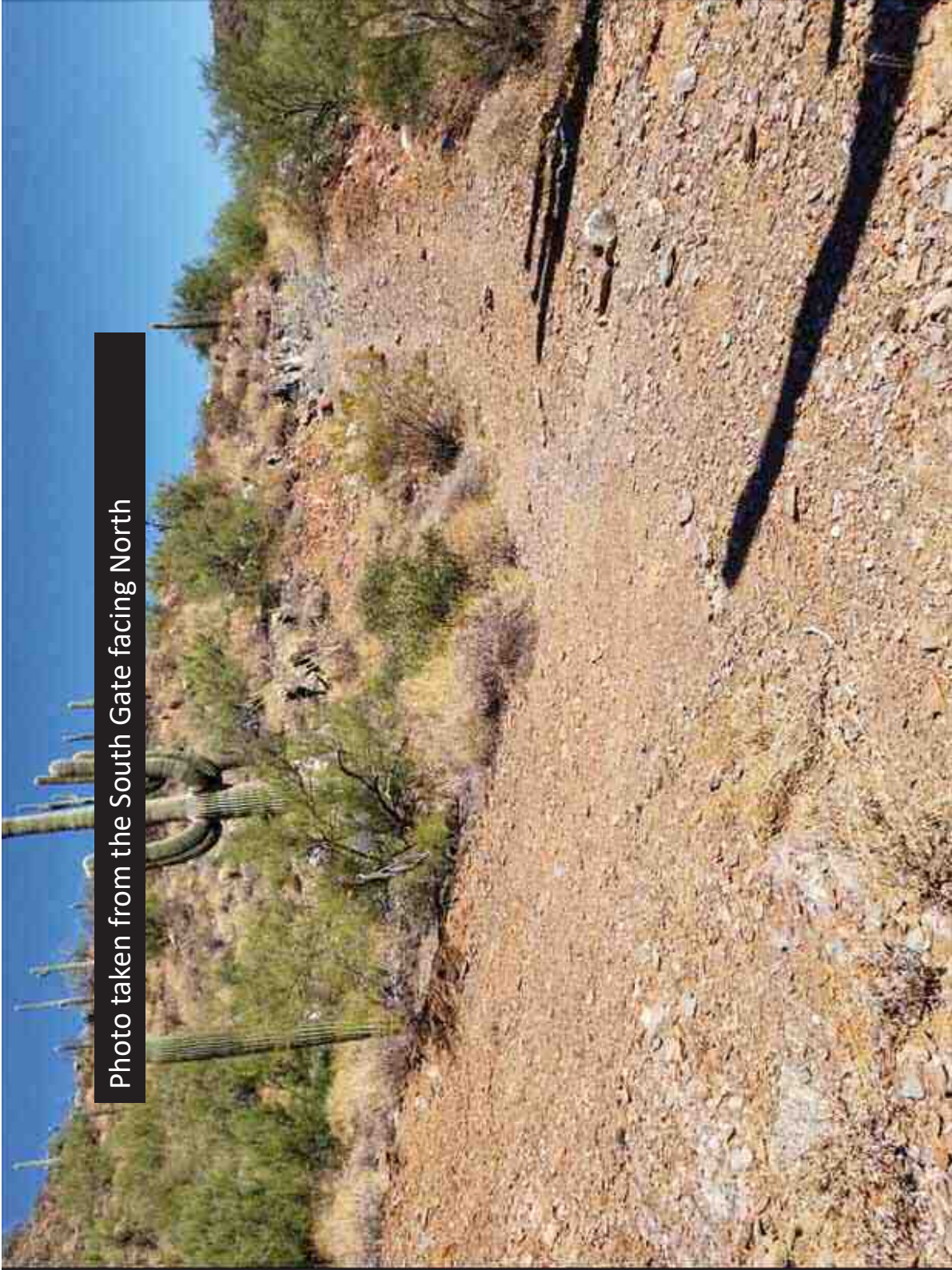
Site Feature 9 (looking North)



Mining pit



Photo taken from the South Gate facing North

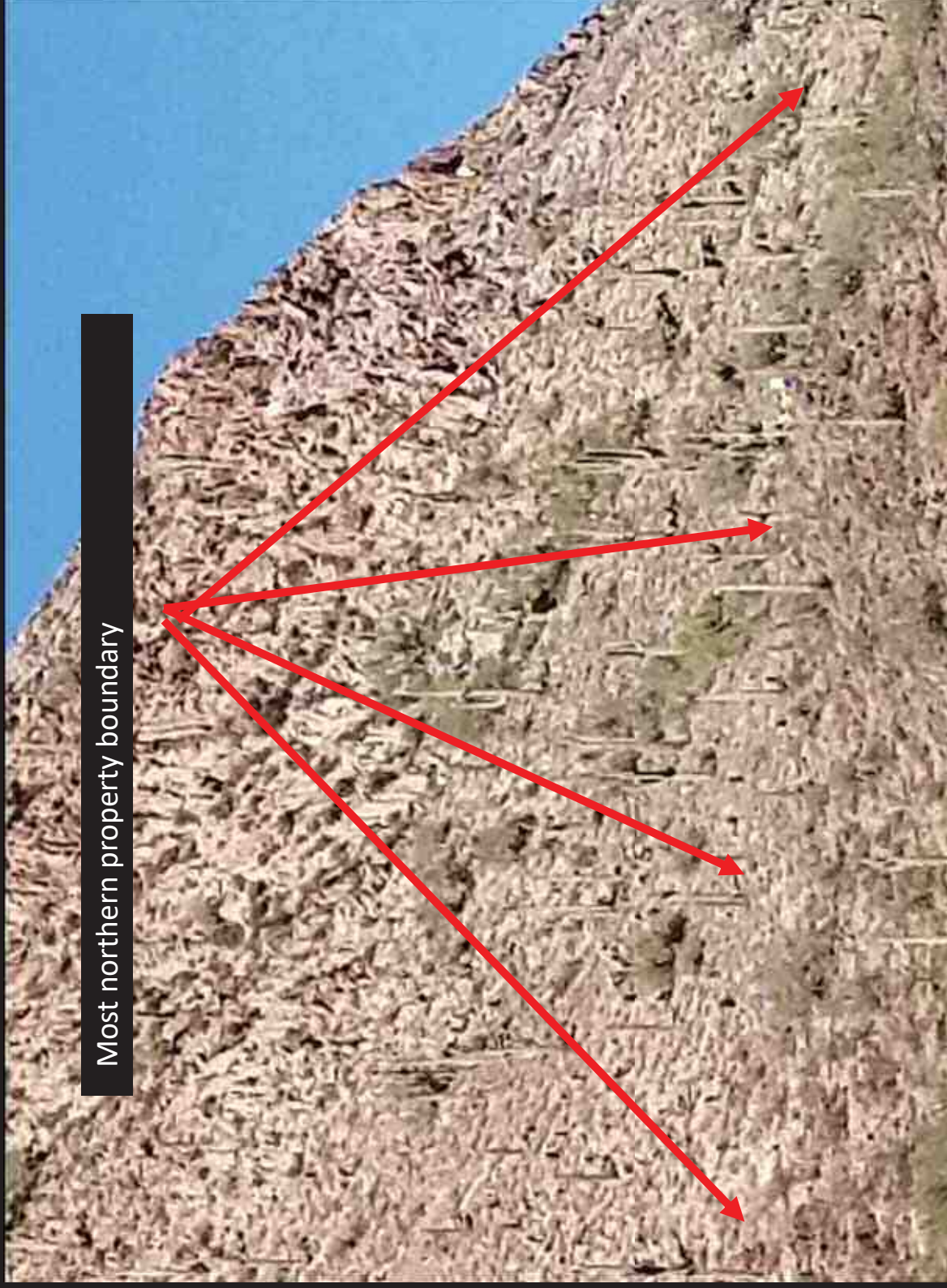




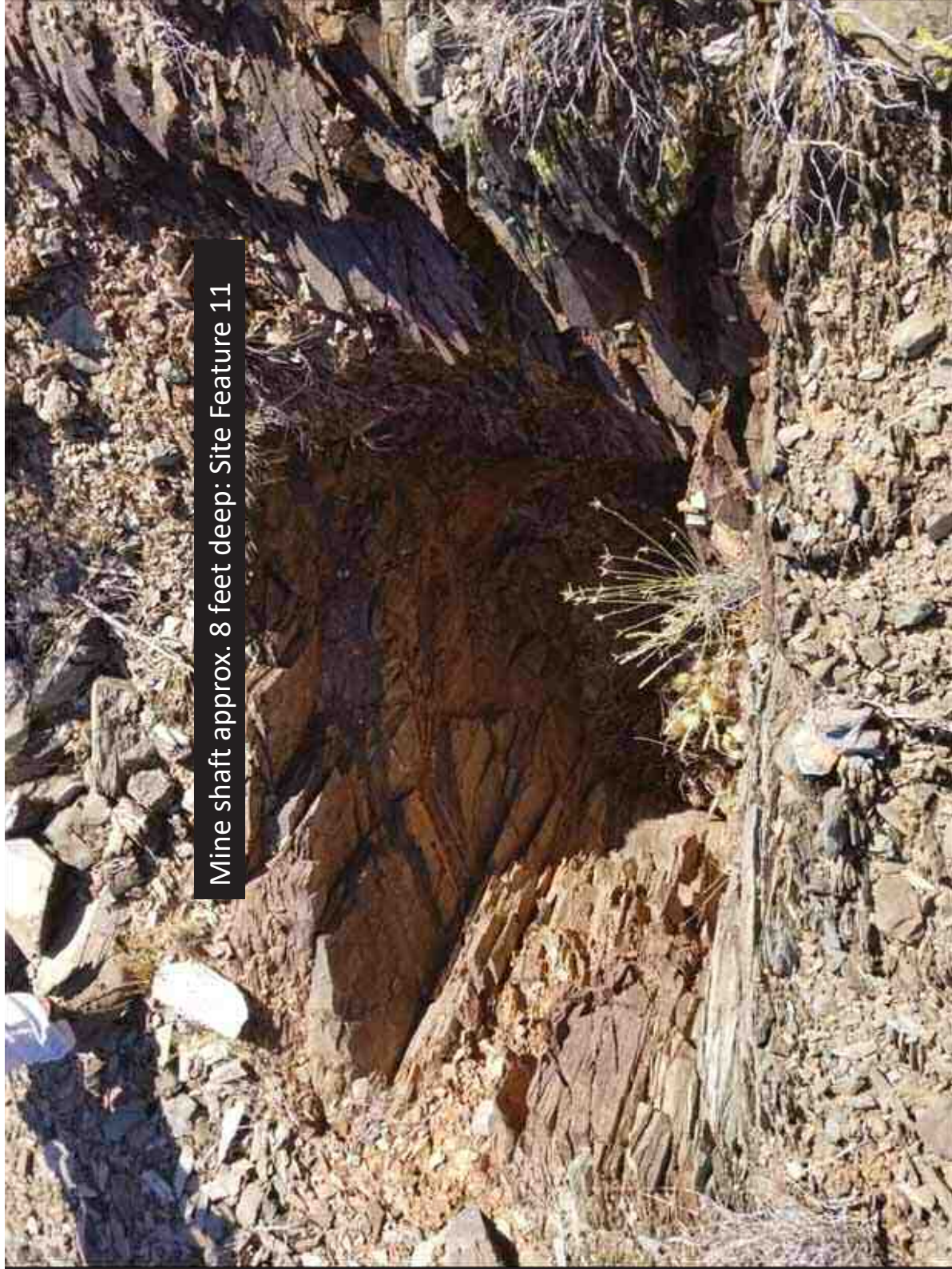




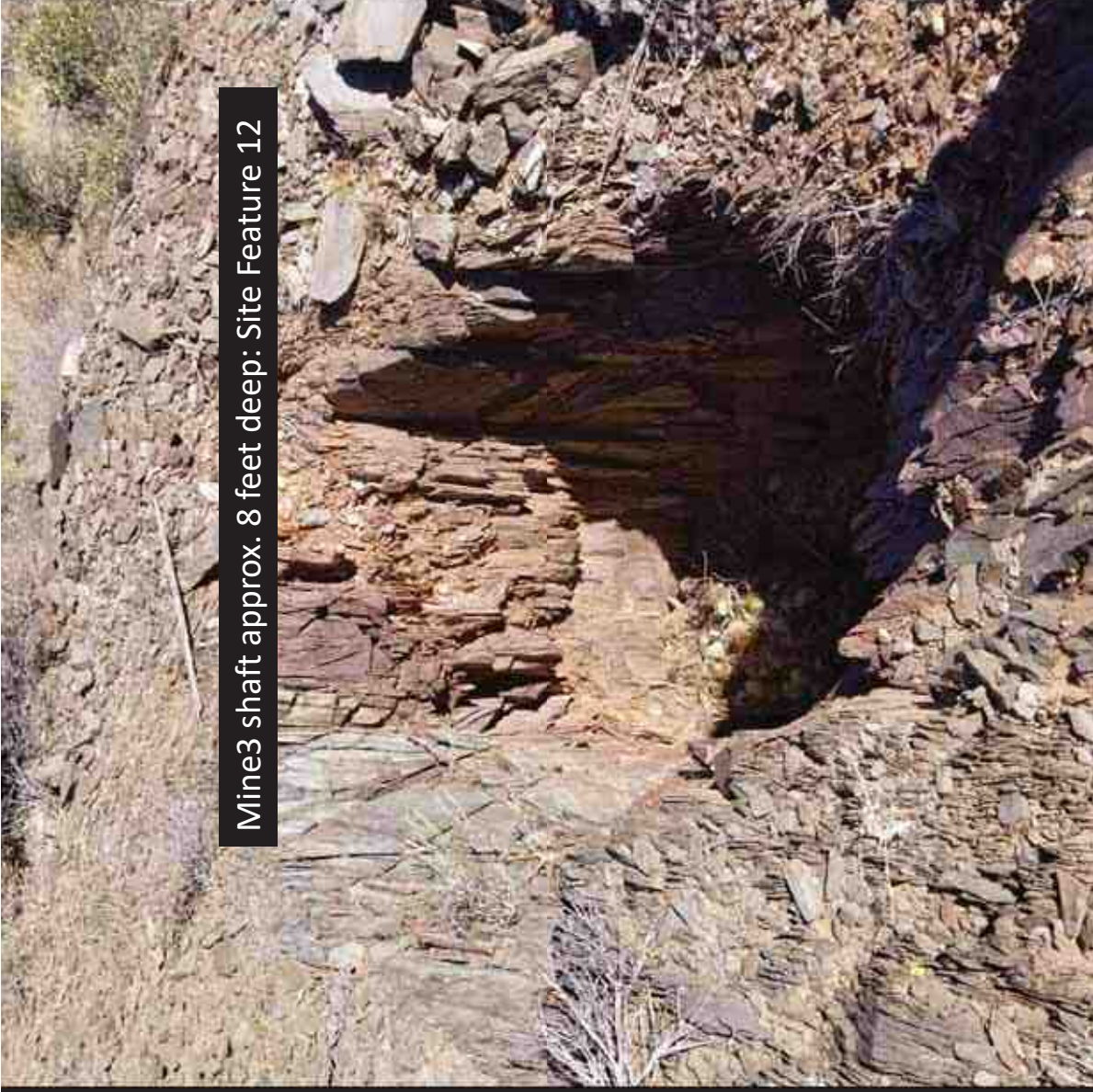
Most northern property boundary



Mine shaft approx. 8 feet deep: Site Feature 11



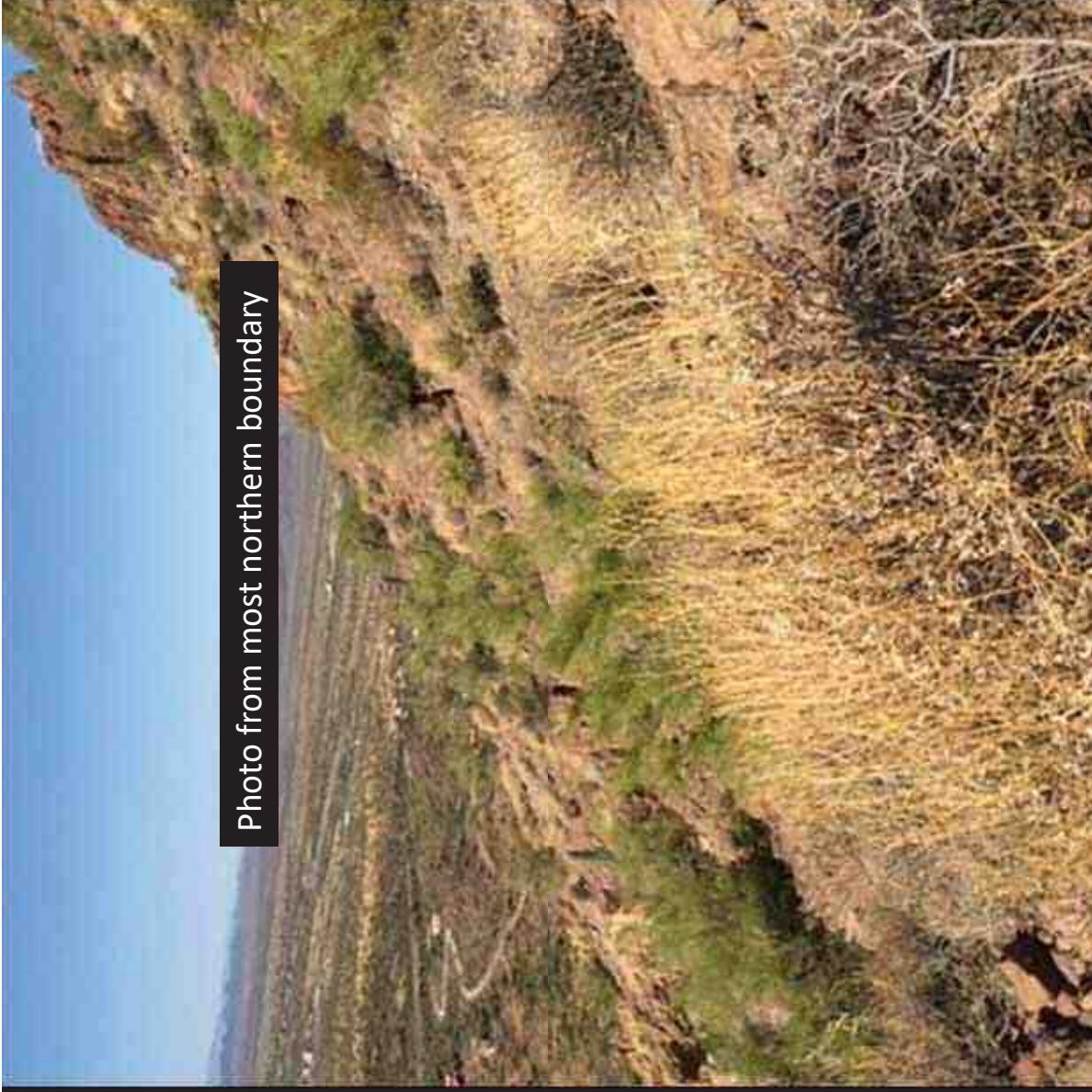
Mine3 shaft approx. 8 feet deep: Site Feature 12



Steep Slopes



Photo from most northern boundary



Appendix B: Statement of Work

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Statement of Work 46402 27th Avenue, Maricopa County, Arizona

CHAPTER 1. OBJECTIVE

The objective of this task order is to remove any Munitions and Explosives of Concern (MEC), Material Potentially Presenting an Explosive Hazard (MPPEH) and Improvised Explosive Devices (IED's) from 27th Avenue, Maricopa County, Arizona Site. The 27th Avenue Site Removal Action (RA) consists of four contiguous parcels of land comprising approximately 112.797 acres.

1.1 SITE DESCRIPTION

1.1.1 LOCATION

The 27th Avenue Remediation Site is located within the unincorporated area of New River, Maricopa County, Arizona and along the Southern slope of Gavilan Peak. The site is 36 miles North of Phoenix Arizona. The street address assigned to the property is 46402 North 27th Avenue associated with Assessor's Parcel Number (APN) parcel 202-14-013R.

The 27th Avenue Remediation Site consists of four contiguous parcels of land (202-14-005Q, 202-14-013V, 202-14-013R, 202-14-015), the majority of which consists of native desert land. The combined area of the four contiguous parcels comprises approximately 112.797 acres. The property has been improved with two residential structures (a main house and an adjacent bunk house), two storage structures, and an in-ground bunker. The topography of the property is undulating. Much of the property is situated on elevational contours. The Northern section of the property is situated on the declining Southern slope of Gavilan Peak. Two shallow mine shafts were identified on the property. These mine shafts are situated adjacent to each other on the North-central section of A.P.N 202-14-015. Much of the property is covered with desert vegetation. The property has been improved with a dirt access road (27th Avenue). This road extends from the Northeast section of the property along the Eastern section of the site to an area near the Southeast section of the property where it then redirects to the West and continues past the Southwestern section of the property (Preferred Environmental Services, 2003).

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1.1.2 HISTORY

The 27th Avenue Remediation Site was originally developed and utilized in a residential capacity in the early 1960's. The 27th Avenue Remediation Site was then purchased by a private landowner in 1980 and during the period of 1985 to 1990 the land owner used portions of the property in the design and assembly of non-lethal lifesaving munitions for the police and military. The property was also used as a residential and rental property after 1990. For a portion of the time, ending in the late 1990's the property was used as a storage facility for various munitions and supplies. In the late 1990's these inventories were removed from the property and/or destroyed by government agencies. No other uses of the property have been identified (Preferred Environmental Services, May 2003).

In November 2013, a visitor to the property [46402 North 27th Avenue associated with Assessor's Parcel Number (APN) parcel 202- 14-013R] was injured when he stepped on an unidentified explosive device. Bureau of Alcohol, Tobacco and Firearms (BATF), Federal Bureau of Investigation (FBI), Maricopa County Sheriff's Office (MCSO) and Arizona Department of Environmental Quality (ADEQ) responded to the incident. The MCSO discovered several hand grenade and grenade fuzes during the investigation of the incident.

1.1.3 PREVIOUS STUDIES/INVESTIGATION/REMOVAL

U.S. District Court for the District of Arizona issued a search warrant to the BATF (September 23, 1997)

United States Environmental Protection Agency (USEPA), acting at the request of the BATF, and based upon their findings, designated the property (historically recognized as Starflash Ranch) for a time-critical removal action under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and initiated a cleanup of the site. Approximately 4 tons of non-explosive chemicals and 1000 pounds of high explosives were either detonated on-site or removed from the site for disposal by Federal Agencies. Approximately 80 to 100 pounds of explosives and 800 pounds of chemicals were determined to be unstable and were unsafe to move. The United States Army Corps of Engineers (USACE) in support of USEPA and BATF recommended to burn the magazine in which the remaining explosives and chemicals were stored. However, the Concerned Citizens of New River (CCNR) challenged the proposed approach. The State and Federal agencies initially agreed to the proposed plan to burn the remaining explosives and chemicals but as more concern was raised by the community and state

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about the potential health, safety and environmental concerns USEPA informed the State of Arizona that all CERCLA activities would be terminated.

USEPA ceased all CERCLA activities at the Starflash Ranch on March 1, 1999.

At midnight on March 15, 1999, the State of Arizona took custody of the site to preserve the safety of the citizens and the environment initiating a cleanup of the remaining explosives and chemicals left on site by USEPA and BATF. The New River Task Force consisted of the Special Assistant to the Governor and State and County agencies. Over 8000 pounds of explosive materials and hazardous chemicals were identified, inventoried, packed and transported to sites in Louisiana and Utah for disposal. The Operations Report-Explosive Remediation Project: Starflash Ranch (March 15, 1999 to July 15, 1999) was finalized on July 15, 1999.

UXO Pro in support of ADEQ performed a site visit to the 27th Avenue Remediation Site assisted by the current land owner. During the site visit two locations were identified that contained Munition Debris (MD) contamination was identified consisting of hand grenade fuzes and grenade spoons. Two structures [the shed near the primary house (33° 54' 17.4" N / 112° 7' 14.9" W) and the storage shed closest to the southern gate (33° 54' 3.8" N / 112° 7' 24.9" W)] present some concerns that explosive hazards may be present.

1.2 BACKGROUND

This work site is not a DERP-FUDS site nor is it recognized by USEPA as a Superfund Site. This Task Order is issued in conjunction by the State of Arizona Department of Administration (ADOA) and Department of Environmental Quality (ADEQ) as an Emergency Response Action (ERA) under the Water Quality Assurance Revolving Fund. However, work under this awarded contract will follow the guidance established by the DERP-FUDS Military Munition Response Program (MMRP). Any activities involving work in areas potentially containing explosive hazards shall follow USACE, Department of the Army (DA), Department of Defense (DOD) regulations, guidance, standards and manuals, and any applicable State law and regulations.

1.3 GENERAL

1.3.1 The technical approach and level of effort expended to achieve Task Order objectives and standards are solely up to the Prime Contractor (UXO Pro, Inc.) and its Subcontractors (referred to from this point forward as Contractor) to select and develop.

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The State of Arizona recognizes the Contractor's right to change the technical approach and level of effort from that proposed with the understanding that the Contractor shall still meet all project objectives and gain government acceptance.

1.3.2 Quality monitoring and measurement: The Contractor will be evaluated periodically during performance of this task order to ensure compliance with the proposed and accepted performance goals, regulations, guidance and Data Item Descriptions (DIDs), and to document that acceptance criteria (AC), delivery schedule, and the overall completion date are being met. Failure to adequately complete any service or submittal to at least a satisfactory level of quality or timeliness may result in a repeat of the work, or a poor performance evaluation, or both.

1.3.3 Period of Performance (POP) is 12 months from date of the Task Order award.

1.4 PLANNING ASSUMPTIONS

- a. Within this Statement of Work (SOW), MEC includes IEDs or fabricated explosive devices.
- b. Slopes more than 40° present a potential safety hazard. These areas will be assessed by the Contractor and determined if they will be included in the Removal Action.
- c. The destruction or treatment of MEC, MPPEH or IED's will not be completed by the Contractor without seeking permission from the State of Arizona. Upon the discovery of MEC, MPPEH or IEDs they will be marked and reported to the State of Arizona. Should the Contractor be required to perform treatment or disposal operations for the MEC, MPPEH or IED's, the task will be performed as a T&M Task.
- d. No restriction exists for using mechanical equipment in cutting vegetation. Vegetation removal is expected to be limited to dense vegetation areas in which geophysical investigation cannot be achieved otherwise. All cut vegetation will be distributed on site. Trees 4 inches in diameter and larger will not be cut but will be pruned to allow for MEC operations to be conducted. The Saguaro cactus will not be disturbed (i.e. removed, cut or pruned).
- e. There are no Listed as Threatened or Endangered Species or State or Federally protected species known to exist on the 27th Avenue Site. However, if any discoveries are encountered the Contractor will stop work and notify the State of Arizona. All wildlife will be protected during the RA (No wanton harm to wildlife will be allowed by the Contractor such as; the killing rattle snakes or taking chuckwallas, etc.)
- f. There are no archeological sites known to exist on the 27th Avenue Site.

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However, if any discoveries are encountered the Contractor will stop work and notify the State of Arizona.

- g. The Contractor will use all metal detectors.
- h. The investigation of the 112.797 acres is based on site history and the size of the private landowner's parcel. There will be no RA outside of the 112.797 acres. Should evacuations be required due to RA activities the State of Arizona will assist with the required coordination.
- i. In the event the Contractor is tasked with disposal by detonation they will not store donor explosives on site but will utilize On-Call explosive delivery within 24 hours of State of Arizona's approval for the detonation of the explosive hazard identified. The Contractor will provide security on any MEC, MPPEH or IEDs discovered until disposal can be completed.
- j. The State of Arizona and the private land owner will coordinate site access of Authorized Visitors and through the UXO Safety Officer. Due to the possible sensitive nature of the hazard, all MEC operations will cease for Authorized Visitors. Authorized Visitors must be approved by the State of Arizona. The Prime Contractor Quality Assurance (QA) role for this RA is integral to the field operations and is considered by the State of Arizona as essential personnel. QA will be conducted by the Prime Contractor as required. The UXO Quality Control Specialist (UXOQCS) will accompany the QA personnel during inspections and acceptance of work completed.
- k. Senior UXO Supervisor (SUXOS) will submit a Daily Operations Report to the Prime Contractor that details all work performed that day and work scheduled for the next day's operation.
- l. The UXOQCS will provide documentation of all areas that have been accepted as cleared by best management practices.
- m. Buildings, magazines, and sheds will be thoroughly inspected to confirm no MEC, MPPEH, IED's, or explosive related hazards or chemical compounds used to make explosives remain from previous removal actions or activities.
- n. Munitions Constituents sampling and the development of a Risk Assessment is not a requirement for this RA. However, sampling of burned debris (cultural and potential munitions related) is required prior to removal from site and disposal in a land fill. Post detonation sampling for explosive analytes is required.
- o. Closed containers such as paint cans that can contain explosives or chemicals in which to fabricate explosives will be inspected (e.g., x-ray, sampling etc.) to identify any hazardous materials prior to going to the landfill.
- p. Establishing and maintaining an Administrative Record is not required under this contract.

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- q. Landowner Indemnification: Landowner will be indemnified from damages to property or personnel incurred by the Contractor while the Contractor is conducting the RA. **All site visitors and contractors are required to sign a waiver (see Attachment A).**
- r. Historical documents indicate two mineshafts are located on the property. The current land owner and site visits were unable to confirm of their existence. However, provide cost to visually investigate (via remote camera or other means) the mineshafts. Assume the mineshafts are 100 ft. in depth and descend vertically without any lateral deviations.
- s. Appropriate respirator protection will be worn when cleaning and removing debris from the structures on the property in order to protect workers from Hantavirus resulting from rodent feces that can be found in the site structures.

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CHAPTER 2. PROJECT TASKS

2.1 TASK 1: PROJECT KICKOFF MEETING. FFP

The Contractor will participate in a Kickoff meeting with the Contracting Officer and the State of Arizona representatives. The Contractor will provide a project schedule and briefing materials in which to support the Kickoff Meeting. Upon completion of the Kickoff Meeting the Contractor will provide a written Kickoff Meeting Report within 5 working days to the State of Arizona. Upon receipt of the State of Arizona comments the Contractor will finalize the Kickoff Meeting Report within 5 days of receiving the comments.

2.2 TASK 2: ABBREVIATED UFP QUALITY ASSURANCE PROJECT PLAN (UFP-QAPP) AND QUALITY ASSURANCE SURVEILLANCE PLAN (QASP). FFP

2.2.1 Objective: Prepare, submit, and gain acceptance of an Abbreviated UFP-QAPP, and a QASP. These are detailed and comprehensive plans covering all aspects of project execution as required in Task 5.

2.2.2 Performance Standard: Prepare the Abbreviated UFP-QAPP in accordance with Section 1.0 of DID WERS-001.01 and other applicable DIDs for sub plans, EM 200-1-15, EM 385-1-1, EM 385-1-97 (including Errata Sheets and Changes), Intergovernmental Data Quality Task Force UFP-QAPP Manual, and other interim guidance, DIDs, or State regulatory guidance, as appropriate. The Draft QASP shall meet the requirements described in guidance. The QASP shall include systematic methods used to monitor performance and to identify the required documentation and the resources to be employed to include monitoring Quality Control requirements in guidance, DIDs and the Contractor's Quality Control Plan.

2.2.3 Explosive Safety Submission (ESS) will be included as an Appendix to the UFP-QAPP and NOT as a standalone document. The ESS will be in accordance with DoD 6055.09-M, EM 385-1-97, Errata Sheet #3, and DID WERS-003.01. The ESS will be approved with the UFP-QAPP and will not be submitted to DoD for review and approval but will be used as a planning document in support of the UFP-QAPP.

2.2.4 Acceptance Criteria (AC): Acceptance of UFP-QAPP and all sub-plans with a Draft for the State of Arizona review and an Approved Final. Draft QASP reflects requirements of the UFP-QAPP with one revision required. Upon receipt of the State of Arizona Comments an onboard review teleconference will be used to resolve all comments in

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order to expedite the schedule. No Draft/Final documents are expected.

2.2.5 Measurement / Monitoring: Review of the Abbreviated UFP-QAPP and QASP to verify that the minimum acceptable content has been provided and meets applicable guidance.

2.2.6 Incentives/Disincentives: Satisfactory-Payment per milestone payment plan /Unsatisfactory - Re-performance of work at Contractor's expense (payment is provided upon acceptance of the deliverable).

2.2.7 Specific Task Requirements: In-progress review (IPR) meetings shall include but are not limited to, regular feedback to State of Arizona on the progress of its work through teleconferences, and electronic mails as required by the State of Arizona. The Abbreviated UFP-QAPP shall include methods that will be utilized to ensure that data generated are of an acceptable quality for its intended use. The Contractor shall include a discussion as to how the project shall be managed and implemented. The Contractor will produce a streamlined Abbreviated UFP-QAPP as appropriate for this task order.

2.2.8 The review of the Draft Abbreviated UFP-QAPP will be conducted as an on-board review with formal presentation to the State of Arizona at Arizona Department of Environmental Quality's Office to discuss and resolve State comments on the MEC-QAPP (see Task 3).

2.3 TASK 3: TECHNICAL PROJECT PLANNING (TPP): FFP

2.3.1 The objective of this task is for the Contractor to implement the TPP process in accordance with (IAW) EM 200-1-2, and Interim Guidance Document 01-02. The Contractor shall anticipate 2 meetings to be conducted in Phoenix, Arizona. Meetings shall be for 1 day each plus travel. The Contractor shall plan for meetings to occur as follows:

2.3.1.1 First meeting: Presentation of Abbreviated UFP-QAPP to the State of Arizona.

2.3.1.2 Second meeting: Presentation of Site Specific Final Report (SSFR) to the State of Arizona.

2.3.2 The Contractor shall organize and coordinate all meetings. The State of Arizona will provide the TPP site location. The Contractor shall prepare, submit for review and gain acceptance of a TPP memorandum containing the Data Quality Objectives (DQOs) and other results of the TPP meetings, including a conceptual site model (CSM). The

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CSM will be compatible with current Geographic Information System (GIS) standards.

2.4 TASK 4: GEOSPATIAL DATA. FFP

2.4.1 Objective: Utilize GIS in the maintenance and management of any project and geospatial data.

2.4.2 Performance Standard: Manage and maintain project data, and update the CSM in GIS IAW DID WERS-007.01, EM 200-1-2, EM 1110-1-1200, EM 200-1-15, ER 1110-1-8156, EM 1110-1-2909 and applicable Interim Guidance Documents.

2.4.3 AC: Acceptance of GeoSpatial Data submissions meets quality and formatting requirements. Measurement / Monitoring: Review by the State of Arizona using guidance cited to determine acceptability.

2.4.4 Incentives/Disincentives: Satisfactory – Payment per Milestone Schedule/Poor - re-performance of work at Contractor's expense (payment is provided upon acceptance of the deliverable).

2.4.5 Specific Task Requirements: The GeoSpatial Data shall include:

- a. Maintain and update property GIS data for all landowners within the project boundaries. Property owner privacy will be preserved. Property owner names shall not be disseminated in any documents.
- b. A pre-and-post-project removal action geospatial data analysis will be performed using a GIS.
- c. All available existing data that is applicable to the project will be consolidated into the GIS database.
- d. The analyses may detail the fieldwork strategies, areas of concern, survey requirements, environmental concerns, milestones and/or other factors that affect product delivery and future action planning.
- e. Entities that may be affected by removal actions include but are not limited to: landowners, homeowners, rental tenants, schools, utilities, roads, businesses, recreational areas, air traffic, water bodies and/or industries.
- f. The GIS database shall be a living repository that is refined throughout the life of the project.
- g. Incorporate layers that overlay on maps of the site that identify physical features, MEC, MPPEH, Munitions Debris (MD) and IEDs found during the RA. Examples include: streets, on site cut roads, mining features/excavations, manmade structures, anomalies, MEC positively identified, identifiable MD, IED discovered locations, cultural resources, environmental, biological, and socio-economic variables.

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- h. Archeological site location(s) will not be released to the public without written permission from the State of Arizona.
- i. Perform civil surveys IAW EM 200-1-15 and DID WERS-007.01.
- j. Final GIS deliverable shall include all documentation, reports, meeting minutes, databases, etc. created, developed, or modified under this task order in original and PDF format. This deliverable shall meet QA acceptance prior to payment of the final invoice.

2.5 TASK 5: 27TH AVENUE RA FIELD ACTIVITIES. T&M

2.5.1 Objective: Conduct a RA of 112.797 acres for the 27th Avenue site in accordance with the accepted Abbreviated UFP-QAPP, QASP, ESS, and all applicable standards such that the objective of this SOW is met. The Contractor shall also conduct all field work to sufficiently reduce the imminent hazard of contamination to potential receptors. Field Work shall begin within **60 days** of approval of the Kickoff Meeting Minutes.

2.5.2 The Contractor will select the geophysical investigation method best suited for the site (note advance geophysical classification will not be used on this RA) for the following investigation areas:

NOTE: Submit each of the following as a sub task with their own line item within the TA and cost submission.

2.5.2.1 Surface/subsurface clearance to 12 inches or to bedrock whichever is reached first for the 27th Avenue Remediation Site.

2.5.2.2 Surface/subsurface clearance to 12 inches of dirt and gravel roads existing on the site.

2.5.2.3 Remove any explosive hazards from buildings and structures and dispose of the hazards by approved methods

2.5.2.4 Remove the shed closest to the primary property (33° 54' 17.4" N / 112° 7' 14.9" W). Building materials will be inspected and certified as safe prior to removal to a land fill.

2.5.2.5 Remove the shed closest to the southern gate (33° 54' 3.8" N / 112° 7' 24.9" W). Building materials will be inspected and certified as safe prior to removal to a land fill.

2.5.2.6 Clear all berms located near the primary house and the corral of explosive hazards down to grade.

2.5.2.7 If, during the surface or subsurface removal action and investigation of trash pits, suspect MEC or IEDs burn sites, or demolition sites are discovered, these will be

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investigated to the depth of detection and all MEC removed and properly detonated or appropriately disposed of.

2.5.2.8 Remove any cultural debris within buildings and grids to an approved landfill. All materials will be certified as safe. If asbestos or lead is suspected sampling prior to demolition activities must be completed. If asbestos or lead is found on site the proper disposal of asbestos or lead by the contractor is required.

2.5.2.9 Concentrated munitions use area (CMUA) containing indicators of a demolition range, training or testing area will be cleared to the depth of detection. The presence of MEC, MD, IED's or MPPEH are indicators of a CMUA.

2.5.2.10 Any burn sites with materials which will be removed to a land fill shall be sampled and certified as safe and free of contaminated waste materials prior to transporting the debris to a landfill. Two sites are suspected to exist (rodeo area and inside the magazine). The Contractor will present the appropriate sampling methods/analytes within the Abbreviated UFP-QAPP.

2.5.3 Performance Standard:

2.5.3.1 Conduct a RA in accordance with USACE guidance documents and Arizona State Law at the 27th Avenue Project Site meeting the project DQOs.

2.5.3.2 Failure criteria for surface and subsurface clearance is MEC/MD/IED remaining in a completed grid of a size equal to or larger than "one inch wide" by "one inch high" (depth is not specified). This failure criteria roughly meets the size of a hand grenade fuze.

2.5.3.3 Provide the following results in the Site-Specific Final Report (SSFR):

- a. Demonstrate that the work was performed in accordance with the UFP-QAPP, applicable laws, regulations, and guidance documents.
- b. Demonstrate that any MEC, MPPEH, and IEDs have been identified, delineated, and treated through detonation or other state approved methods as agreed upon and approved by the State of Arizona.
- c. Demonstrate through QC that any surface, and subsurface MEC down to 12 inches bgs, have been removed from the project site other than from areas where terrain does not allow removal or is specified for surface clearance or visual investigation only." Any MPPEH, MD and IED debris [consider the treatment of IED debris as similar or the same as MD] is processed in accordance with EM 385-1-97 and applicable Errata Sheets.

2.5.3.4 Incentives/Disincentives: Satisfactory-Payment per milestone payment plan /Unsatisfactory - Re-performance of work within the specified grids/lots or sub task that

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failed State of Arizona's acceptance per the above stated standard at Contractor's expense (payment is provided upon acceptance of the deliverable).

2.6 TASK 6: SITE SPECIFIC FINAL REPORT (SSFR). FFP

2.6.1 Objective: Prepare, submit and gain acceptance of the SSFR.

2.6.2 Performance Standard: The SSFR shall document the results of the RA and comply with EP 1110- 1-18 and DID WERS-013.01.

2.6.3 AC: Acceptance of the SSFR with two revisions.

2.6.4 Measurement/Monitoring: Review of the SSFR against guidance to verify that the minimum acceptable content has been provided.

2.6.5 Incentives/Disincentives: Satisfactory-Payment per milestone payment plan /Unsatisfactory - Re-performance of work at Contractor's expense (payment is provided upon acceptance of the deliverable).

The information being shared in this Statement of Work, the reference documents provided and any information or data collected during the Contractor Site Visit are **CONFIDENTIAL** to the State of Arizona. The Contractors and their employees will avoid making these documents public or will refrain from discussing this project with the public or with news outlets/organizations without permission from the State of Arizona Department of Administration.

CHAPTER 3. REFERENCE DOCUMENTS

3.1.1 Preferred Environmental Services, 2003, *Environmental Phase I Assessment* (May 28, 2003).

3.1.2 Schamadan, James, M.D., 1999, Final Operations Report, Starflash Ranch – New River, Arizona, March 15 through July 15, 1999 (July 15, 1999).

3.1.3 Sherman & Howard, Memorandum to Michael W Wright and Gregory W. Falls from Jonathan D. Loe, Ownership of Road Across Starflash Ranch Property, August 23, 2017.

3.1.4 TetraTech, 1998, Final Report, Development and Relative Ranking of Remedial Alternatives for: Explosive/Chemical Shed, 44830 N. 27th Avenue, New River, Arizona (December 1998).

3.1.5 USEPA, 1998, *New River Update*, EPA Superfund Emergency Response Program, Volume 3, March 1998.

3.1.6 Aerial Diagrams of Starflash Ranch.

3.1.7 MCSO Injured Person/Explosion Reports.

3.1.8 MCSO photos of discovered Grenade.

Appendix C: Maps



Water
AST

Main House

Shed (damaged by
MCPO planned
detonation)

Bunk
House

Dig site where
MD was
discovered

Corral

Dry Wash
where MD was
discovered

Cultural Debris
Dump Site

Mining
Excavations

Google Earth

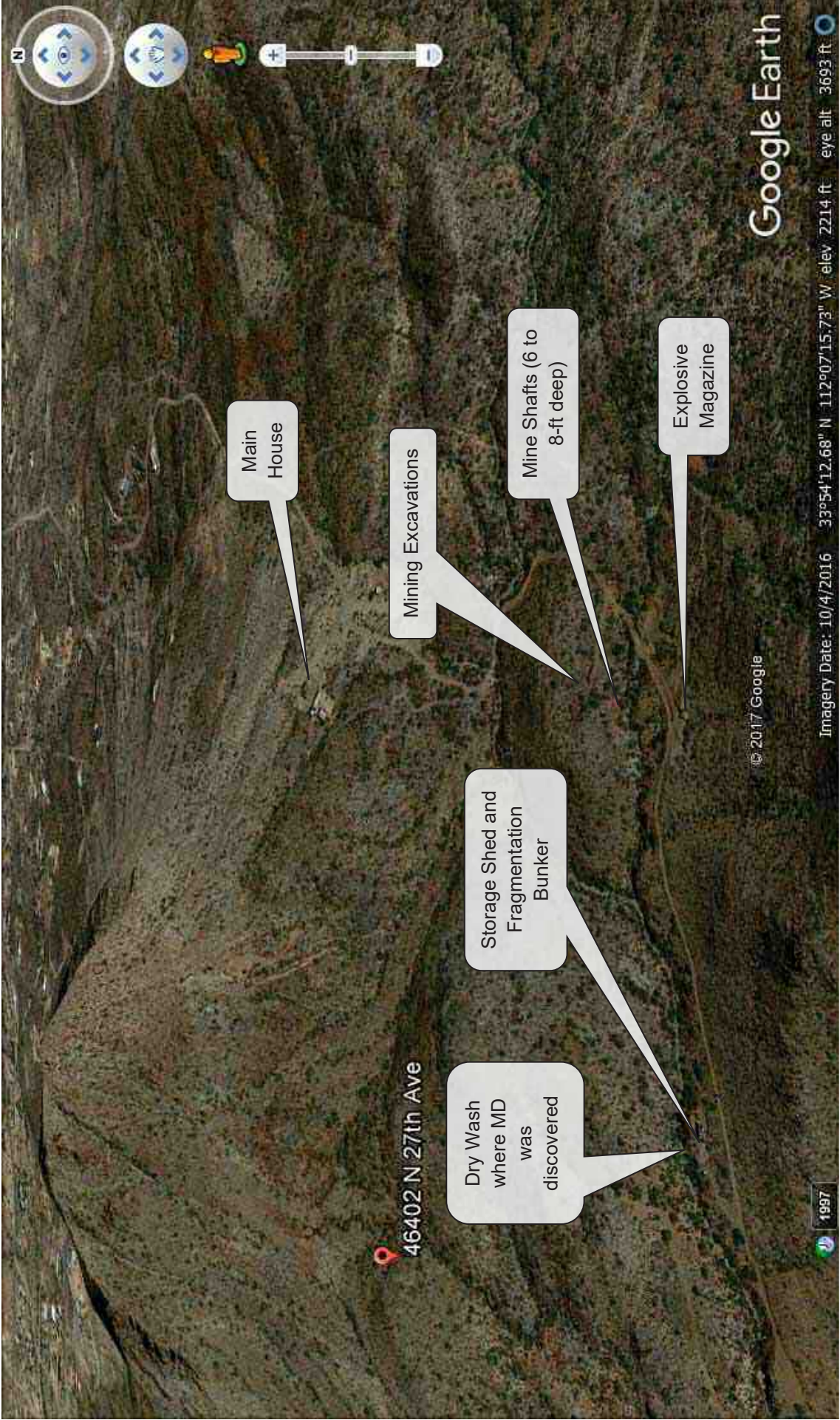
1992

Imagery Date: 10/4/2016

33°54'15.70"N 112°07'13.48"W

elev: 2243 ft

eye alt: 2824 ft



Main House

Mining Excavations

Mine Shafts (6 to 8-ft deep)

Explosive Magazine

Storage Shed and Fragmentation Bunker

Dry Wash where MD was discovered

46402 N 27th Ave

© 2017 Google

Google Earth

Imagery Date: 10/4/2016 33°54'12.68" N 112°07'15.73" W elev 2214 ft eye alt 3693 ft

1997

Appendix D: Daily Log



15 Park Avenue
Gaithersburg, MD 20877

Daily Log

October 4, 2017

Project team met at the Roadrunner restaurant at 6:00 a.m. Mr. Rivera conducted a safety brief and verified site visitors had signed waivers on file. Mr. Bourque, Mr. Rivera and Mr. Johnson departed to begin the site visit. Mr. Levesque and the survey team departed to locate the project site monuments. Two monuments were confirmed at each end of the property and performed GPS geodetic checks over the monuments. Utilizing Munitions and Explosives of Concern (MEC) avoidance techniques Mr. Levesque escorted the survey team to the selected location for the base station to be set up. After the base was placed and confirmed that it was operational the Survey Team moved to the west side of the property and began installing the survey pins for hazard sign placement. The days operations were completed at 1:00 p.m.

October 5, 2017

The Survey Team mustered for the tailgate safety brief near the western edge of the property. The Survey Team hiked up to the northern property boundary to install the survey pins starting on the west side moving eastward. Planned pin positions 168 through 172 were located along extremely steep slopes (70-degree slope) which exceeds the threshold for safe working conditions identified in the Abbreviated Accident Prevention Plan (AAPP) therefore the survey pins were moved to the base of the slopes to new pin locations 1005 to 1018 (see Attachment 1). One of the Survey Team Members rolled his ankle but he determined he could still continue with work and there was no work stoppage. Mr. Levesque reported the incident to the UXO Pro Safety Officer and Project Manager. ADEQ was notified. There wasn't any lost work or medical treatment needed so an OSHA incident report was not required. Shallow mineshafts were identified during the survey of the northern boundary and their locations are provided in Attachment 1 at pin locations 2000 through 2004. The Survey Team secured for the day at 2:15.

October 6, 2017

The Survey Team mustered for the tailgate safety brief near the western edge of the property at 5:45 A.M. The Survey Team placed performed their equipment checks and set up the base station. The Survey Team concentrated the days efforts on the

western boundary and the northern boundary. When locating the pin locations the Survey Team determined that one of the neighboring properties had placed a driveway encroaching on the project site. Approximate pin locations 121 to 124 identify where the neighboring property owner has crossed onto the 27th Avenue Remediation Site property. The southwest corner is impacted by a ravine and to the east the terrain becomes very steep (approximately 60 degree slope) so pin locations were not placed at either location. The Survey Team completed their task left the site at 12:45 p.m.

October 10, 2017

The Post and Sign Installation Team mustered at the Roadrunner Restaurant and Saloon in New River. Conducted an operational and safety briefing and moved to the 27th Avenue Remediation Site. Upon arrival the team placed the sign posts and the hazard signs at the survey pin locations. Once the posts and signs were laid out the team started the installation of the posts by pounding them into the ground using a hydraulic post driver. Half of the posts were installed on the southern boundary when the hydraulic post driver stopped working so the team had to secure for the day and trade the broken unit in for a working one.

October 11, 2017

The Post and Sign Installation Team mustered at the southern gate to the 27th Avenue Remediation Site conducted a tailgate safety brief and continued with the post and sign installation. There were no issues to report.

The second Site Visit Team which included the UXO Companies bidding on the Phase 2 work (USA Environmental, Inc, ZAPATA Inc., SRS, LLC.) mustered at the Roadrunner Restaurant and Saloon for the Site Brief and Safety Brief at 6:30 A.M. Ms. Karin Harker (ADEQ) and Mr. Mike Rambole (ADOA) also attended the morning briefings. Upon the completion of the morning meeting Ms. Harker and Mr. Rambole departed for Phoenix. The rest of the attendees transited to the 27th Avenue Remediation Site. Upon arrival the UXO Companies were provided a site tour of all building's and structures. Upon completion of the site tour the teams split up into three groups and started evaluating the site to develop their technical approach and cost submission for Phase 2. The site visit continued until all UXO Companies were satisfied with the data they collected. The last company left the site at 2 P.M.

October 12, 2017

The Post and Sign Installation Team mustered at the 27th Avenue Remediation Site conducted a tailgate safety brief. The team completed the post and sign installation task at 1:30 P.M.

Attachment 1
Map of Property Boundary

Field surveyor:

Computer operator:

Reference:



1455 -156 -157 -158 -159 -160 -161 -162 -163 -164 -165 -166 -167 -168 -169 -170 -171 -172 -173 -174 -175 -176 -177 -178 -179 -180 -181 -182 -183 -184 -185 -186 -187 -188 -189 -190 -191 -192 -193 -194 -195 -196 -197 -198 -199 -200 -201 -202 -203 -204 -205 -206 -207 -208 -209 -210 -211 -212 -213 -214 -215 -216 -217 -218 -219 -220 -221 -222 -223 -224 -225 -226 -227 -228 -229 -230 -231 -232 -233 -234 -235 -236 -237 -238 -239 -240 -241 -242 -243 -244 -245 -246 -247 -248 -249 -250 -251 -252 -253 -254 -255 -256 -257 -258 -259 -260 -261 -262 -263 -264 -265 -266 -267 -268 -269 -270 -271 -272 -273 -274 -275 -276 -277 -278 -279 -280 -281 -282 -283 -284 -285 -286 -287 -288 -289 -290 -291 -292 -293 -294 -295 -296 -297 -298 -299 -300 -301 -302 -303 -304 -305 -306 -307 -308 -309 -310 -311 -312 -313 -314 -315 -316 -317 -318 -319 -320 -321 -322 -323 -324 -325 -326 -327 -328 -329 -330 -331 -332 -333 -334 -335 -336 -337 -338 -339 -340 -341 -342 -343 -344 -345 -346 -347 -348 -349 -350 -351 -352 -353 -354 -355 -356 -357 -358 -359 -360 -361 -362 -363 -364 -365 -366 -367 -368 -369 -370 -371 -372 -373 -374 -375 -376 -377 -378 -379 -380 -381 -382 -383 -384 -385 -386 -387 -388 -389 -390 -391 -392 -393 -394 -395 -396 -397 -398 -399 -400 -401 -402 -403 -404 -405 -406 -407 -408 -409 -410 -411 -412 -413 -414 -415 -416 -417 -418 -419 -420 -421 -422 -423 -424 -425 -426 -427 -428 -429 -430 -431 -432 -433 -434 -435 -436 -437 -438 -439 -440 -441 -442 -443 -444 -445 -446 -447 -448 -449 -450 -451 -452 -453 -454 -455 -456 -457 -458 -459 -460 -461 -462 -463 -464 -465 -466 -467 -468 -469 -470 -471 -472 -473 -474 -475 -476 -477 -478 -479 -480 -481 -482 -483 -484 -485 -486 -487 -488 -489 -490 -491 -492 -493 -494 -495 -496 -497 -498 -499 -500 -501 -502 -503 -504 -505 -506 -507 -508 -509 -510 -511 -512 -513 -514 -515 -516 -517 -518 -519 -520 -521 -522 -523 -524 -525 -526 -527 -528 -529 -530 -531 -532 -533 -534 -535 -536 -537 -538 -539 -540 -541 -542 -543 -544 -545 -546 -547 -548 -549 -550 -551 -552 -553 -554 -555 -556 -557 -558 -559 -560 -561 -562 -563 -564 -565 -566 -567 -568 -569 -570 -571 -572 -573 -574 -575 -576 -577 -578 -579 -580 -581 -582 -583 -584 -585 -586 -587 -588 -589 -590 -591 -592 -593 -594 -595 -596 -597 -598 -599 -600 -601 -602 -603 -604 -605 -606 -607 -608 -609 -610 -611 -612 -613 -614 -615 -616 -617 -618 -619 -620 -621 -622 -623 -624 -625 -626 -627 -628 -629 -630 -631 -632 -633 -634 -635 -636 -637 -638 -639 -640 -641 -642 -643 -644 -645 -646 -647 -648 -649 -650 -651 -652 -653 -654 -655 -656 -657 -658 -659 -660 -661 -662 -663 -664 -665 -666 -667 -668 -669 -670 -671 -672 -673 -674 -675 -676 -677 -678 -679 -680 -681 -682 -683 -684 -685 -686 -687 -688 -689 -690 -691 -692 -693 -694 -695 -696 -697 -698 -699 -700 -701 -702 -703 -704 -705 -706 -707 -708 -709 -710 -711 -712 -713 -714 -715 -716 -717 -718 -719 -720 -721 -722 -723 -724 -725 -726 -727 -728 -729 -730 -731 -732 -733 -734 -735 -736 -737 -738 -739 -740 -741 -742 -743 -744 -745 -746 -747 -748 -749 -750 -751 -752 -753 -754 -755 -756 -757 -758 -759 -760 -761 -762 -763 -764 -765 -766 -767 -768 -769 -770 -771 -772 -773 -774 -775 -776 -777 -778 -779 -780 -781 -782 -783 -784 -785 -786 -787 -788 -789 -790 -791 -792 -793 -794 -795 -796 -797 -798 -799 -800 -801 -802 -803 -804 -805 -806 -807 -808 -809 -810 -811 -812 -813 -814 -815 -816 -817 -818 -819 -820 -821 -822 -823 -824 -825 -826 -827 -828 -829 -830 -831 -832 -833 -834 -835 -836 -837 -838 -839 -840 -841 -842 -843 -844 -845 -846 -847 -848 -849 -850 -851 -852 -853 -854 -855 -856 -857 -858 -859 -860 -861 -862 -863 -864 -865 -866 -867 -868 -869 -870 -871 -872 -873 -874 -875 -876 -877 -878 -879 -880 -881 -882 -883 -884 -885 -886 -887 -888 -889 -890 -891 -892 -893 -894 -895 -896 -897 -898 -899 -900 -901 -902 -903 -904 -905 -906 -907 -908 -909 -910 -911 -912 -913 -914 -915 -916 -917 -918 -919 -920 -921 -922 -923 -924 -925 -926 -927 -928 -929 -930 -931 -932 -933 -934 -935 -936 -937 -938 -939 -940 -941 -942 -943 -944 -945 -946 -947 -948 -949 -950 -951 -952 -953 -954 -955 -956 -957 -958 -959 -960 -961 -962 -963 -964 -965 -966 -967 -968 -969 -970 -971 -972 -973 -974 -975 -976 -977 -978 -979 -980 -981 -982 -983 -984 -985 -986 -987 -988 -989 -990 -991 -992 -993 -994 -995 -996 -997 -998 -999 -1000



N0°00'00"E

Plot Scale: 1" to 300 ft
Printed on 10/11/2017, at 9:31:16 AM
Printed from Trimble Geomatics Office

Site: Not selected, System: US State Plane 1983
Zone: Arizona Central 0202, Datum: NAD 1983 (Conus)
Project: 17-527X
US Feet Template

Attachment 2
Photos



Photo 1—Sign at the 27th Ave gate



Photo 2—27th Ave gate



Photo 3—Survey point in the middle of the neighboring property's driveway. Note, the points are supposed to be 10' *inside* the property line.



Photo 4—Base set-up day one, above the ranch house.



Photo 5—Mine discovered on 10/6/17



Photo 6—Second mine discovered on 10/6/17



Photo 7—View from the north border looking east from a point roughly due north of the “finger”.



Photo 8— View from the north border looking east from a point roughly 200 yards east of photo 7



Photo 9—Northwest corner of the property



Photo 10—Stake to left of the driveway. The point indicated by the stake is approximately 10' to the left (west) of the property line. All of the driveway adjacent to the surveyed point is on to the 27th Avenue Remediation Site property. Photograph is taken looking North.



Photo 11—Marked point less than 100' from a dwelling